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1. **DOOM Command Line Parameters**

You can run Doom with the following parameters:

- **DOOM /bugs**
  All debug keys enabled

- **DOOM /mem**
  Show mem readout in scope or report window

- **DOOM /EPISODE=x**
  Run episode number x (must have /bugs)

- **DOOM /LEVEL=x**
  Run absolute level x ( " " " )

- **DOOM /END=x**
  Go to end cinematic of episode x

- **DOOM /lothar**
  Run Ep 1, Level 1 in god mode w/ $\infty$ shots

- **DOOM /backdoor**
  Skip copy protection on commercial

- **DOOM /instore**
  Runs demo loop until turned off

- **DOOM /follow**
  Routine names printed in readout window

- **DOOM /diagnostic**
  Upper two windows show diagnostic info

- **DOOM /bubbies**
  Replace all actors with naked women

- **DOOM /prude**
  Cancels effects of bubbies parameters

- **DOOM /drunk**
  Occasionally invokes the bubbies mode

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“I wonder where Buddy is?”
2. Intro and Demo Loop

Demo Loop
Title and Credits:
  Demon face and credits
Cinematic
Demo
High Scores
3. Control Panel

Work on clever, integral menu
Choice of trainer (commercial only, has own WAD)
4. Play Loop

New 3-D engine
5. End of Game

Each game can end three ways: User Abort, player death with no lives left, and player victory. Each is covered here. Where the episodes differ (like the cinematics), you will find the necessary information in the “Unique Bits” section of each episode.

END OF GAME: USER ABORT
When the user invokes the during-game Abort, a prompt window appears asking them to verify. If they say yes, the guy dies in maze and control panel appears.

END OF GAME: DEATH
Pull back to see self die, view remains in maze. Window over view of dead guy – choice to continue If you don’t Control Panel over view.

END OF GAME: WIN
Cinematic (see “Unique Bits” for graphic details) will be very similar for all characters, but will show how player’s character reacts – in one of two small face reaction shots plus individual text.
These are the four characters in Doom:

**Lorelei Chen**

Age: 27  Weight: 151  Height: 5’10”

**Physical Description:** Muscular, tall woman, attractive, but has strangely too-intense eyes. Oriental featured in the brown eyes and black hair, which is drawn back into a large knot. Scar on left shoulder from rock-climbing accident.

**Character Description:** Fiercely competitive, Lorelei intimidates most people. She won her troop boxing championship. Lost a bet that meant she had to pull her application for a glory post. Too late to reapply, she got this post. Married for six months once, husband divorced her for irreconcilable differences. From European Alliance. No one calls her Lorelei.

**Advantages:** Fast. Crack shot with pistol.

**Disadvantages:** Once wounded, she still tends to push herself to compensate, so wounds can keep ticking off more. Not used to bayonet.

**John “Petro” Pietrovich**

Age: 34  Weight: 190  Height: 5’9”

**Physical Description:** Black balding man with thick eyebrows. Missing last joint of right ring finger. Brown eyes.

**Character Description:** Former head of security at AWR (Advanced Weapons Research) Labs, Petro grew tired of the overwhelming bureaucracy of the UAAF. His insubordination cost him his rank, and his assignment on Tei Tenga was his request, made to get away from the epicenter of annoyance while finishing out his term of duty.

**Advantages:** Good with standard shell weapons. Can take damage.

**Disadvantages:** Average speed. Not used to missile weapons.

**Dimitri Paramo**

Age: 37  Weight: 191  Height: 5’11”

**Physical Description:** Bulky, slightly overweight greek-spaniard with swarthy but unkempt looks. Frizzly dark brown hair explodes and falls off his head.

**Character Description:** Dimitri is basically stuck in the low ranks of the military, but that suits him just fine. He wants nothing more from life: give him a clear objective and the chance to release aggression through the freely available high-powered firearms, and he’s happy.

**Advantages:** Very good with all weapons. Can take a lot of damage.

**Disadvantages:** Slow.
Thi Barrett
Age: 22        Weight: 130        Height: 5’6”
Physical Description: Red-haired and trim, Thi (Pronounced “Tee”) has piercing blue eyes, and is stout but gorgeous. A toss of hair tends to fall over her forehead. She holds a bewitching dimpled smile in reserve until it proves useful.
Character Description: Thi has a friendly, if straight-laced, disposition. Father was a sargeant in the UAAF, a career soldier that gave Thi a strong sense of duty and honor. Medallist in unarmed combat competition. She volunteered for this post because no one wanted it, and with a desire to have a variety of experience in her military life.
Advantages: Faster than Average. Hard to hit. Does incredible damage with bayonet.
Disadvantages: Low hit points.

And of course, theres…

Buddy Dacote: the guy that dies
Age: 29        Weight: 202        Height: 6’2”
Physical Description: Very fit and powerful, Buddy always wears a hat that says “BEOS” which stands for “Butt End of Space.” Caucasian with brown/Blond hair and green eyes.
Character Description: Popular and courageous, Buddy got sent to Tei Tenga Darkside for showing up a superior officer. His stay here is just temporary though – he was sent here as a security advisor. Buddy has a good sense of humor. Inside Info: Dacote stands for “Dies at conclusion of this episode.”

OTHER NAMES
Roland Trague, Warren Apisa, Taradina Cassatt, Melanie “Butch” Bucelli, Janella Sabando
7. Episode One:

This must be kept small and powerful. It is limited to a 700K download size.

7.1 Story

**Episode One: Evil Unleashed or All Hell Breaks Loose**

You are a soldier in the UAAF (United Aerospace Armed Forces) assigned to the secondary military research base on the darkside of the giant moon Tei Tenga (nicknamed “the Butt End of Space”). You and four friends are having a game of cards in the hangar bay. One of your friends leaves to go on shift.

Meanwhile, the research team are doing experiments at the anomalies found on the moon. There is a flash of horrible light and energy and two gates open at equidistant points on the moon’s surface, the larger of the two at the lightside. Every awake is quickly killed. One reaching for the alarm button has his hand chopped off. Briefly your friend is grabbed, his hat falling off in the lab. Then they spread out through the airducts and possessing sleeping people with magic.

A short while later, a strange alien creature bursts into the room. (“What the hell?”) A fight ensures. Whoever’s left in your squad investigates the base, where a dark tale begins to unfold. A bunch of small hostile alien creatures have invaded the base. Strange symbols are drawn everywhere in the blood of dead soldiers and scientists. The more you go forward, the stranger and grosser the walls become. One your way, you find your friend’s cap.

After you make it to the control lab. You also find a gate to another place in the wreckage of what was a containment chamber. One the other side, you find two huge beasts in a circular natural rock canyon and the remains of the lab team. Between the beasts is your friend and they quarter him. You defeat the beasts, turn to leave, only to find the hole closing! You’re trapped here! You climb the rock walls, and look at your surroundings from the top of this extinct volcano: “Oh, hell…”
7.2 Actors

These actors appear on episode one:

Other players
Other players will look similar, but their suits will be of different colors. Other color changes will reflect different weapons and in the commercial game, helmets.

Demon-Possessed Humans
Once human, these poor folks were possessed in their sleep. Their uniforms can be palette changed to reflect different behavior.

Flying Imps
Annoying little bastards, the imps come in different flavors, with later ones firing spikes and fire.

Demon Troops
These guys do a lot of damage up close. Later Troops cast magic.

Demon Sergeant
These guys do a lot more damage up close. Later sargeant cast floor-boiling magic.

Bruiser Brothers
Twin terrors at the end of episode one, these guys do the following:
(Insert interesting description of behavior and how they are beat here.)
7.3 Unique Bits

Unique to this episode are the following things.

Setting

The bases on the planet Tei Tenga used to be the glory posts, but lack of progress with the research has cased money to be funneled away to the point of its current staff – a group of dedicated, almost messianic scientists and a skeleton crew of security people.

The two bases are Lightside and darkside: the planet does not rotate, so there is no day or night. The anomalies being studied are on the planet’s magnetic poles.

Intro Cinematic

The intro cinematic goes like this (a lot of pictures are repeated, so don't worry):

View from space of planet (ballmapped):
Military research base, moon Tei Tenga (rotates)
(shows "Lightside" and "darkside", then rotates to darkside and zooms in and fades out)
Zoom into room with live guys playing cards. Small pictures of each of their eyes blinking, looking to other side. Back to main view.
Dacote: I'm out. I gotta go on duty anyway. See you guys.
Petro: Pay-up or die, Buddy.
Dacote (leaving, door shuts): I'll pay you after my shift, Petro. I got some money hid.
View of side of moon. Sparks and red light at both bases.
Lorelei: Would you go, Paramo?
See frightened faces of lab guys, flashed and faded out.
Close-up on eyes again.
Paramo: Leave me alone.
Hand reaches for alarm, chopped off (Both in strobe flash.)
Thi Barrett: Such an indecisive wimp, eh Chen?
Paramo: Stow it, Barrett. All right, I’ll go ... (pause) gimme all your twos.
Buddy looks back and forth in strobe, see demon claw behind him.
See players in silhouette as door to room opens behind them with backlit demon.
Flash of their terrified faces.
Close-up of demon's eyes fades down to title background. Goes to credits.
Credits roll over demon face.
Face scales toward screen as it fades out.

End Cinematic

The end cinematic shows the dead twin demons. Cut to close up of player, then comment from other live players. (Actually, probably just shot of them atop cliff, and just drawing the ones left.)
Show parallaxing pan of Hell.
Cut to player close-up: "Oh, hell..."
Short credit-like roll hyping Doom 2 over scary demon lord's face. Eyes open and big word "Doom" appears masked over it. Fade to black.
Go to high scores, then Demo Loop.

Solution

Go through Depot 2, Mess to Officers' Quarters. Get a Colonel's Hand. Use the Colonel's Hand to get into the control center. Get through Power Plant maze and trip the breakers. Power turns on. Use the Colonel's hand to gain access to the Lab (though monorail system, which is dangerous, because there's a lot of demons and not a lot of health) or through main lab entrance. Fight your way through the lab to the Anomaly passage, using the Colonel's Hand. Go down there, and kick some twin demon butt.
7.3.1 DOOM BUILDINGS AND AREAS: Episode One

This section will show the allocation of puzzles, traps, and POs (photo opportunities, denoted by a ⊗) in the areas of episode one. There should be at least one of each per floor. Every area should have interesting stuff to go and explore, if not vital stuff to obtain. Otherwise, why is it there? Why isn't something cool there instead? Oh, yeah, easter eggs are noted with a ♠.

Graphic Descriptions

Each building has one of these, describing which style of walls are present, and the kind of feeling, mood, and detail I am looking for.

Styles

**Old:** mining colony original structures, made by Porta-Bild Inc, makers of the Snap-Snug™ line of generic economy pressurized buildings. Some of the shabby, Jabba places in Star Wars, Aliens. (Except looks stuck together.)

**UAC:** Bright shiny, high-tech buildings by StarStruct, Inc. 2001 and Star Wars’ Imperial stuff.

**Mine:** Shabby, old, sturdy supports in a energy-carved mine, along with the natural caves in which the anomaly was found. Gray, red, and brown granites and the like.

**Demon:** The demons have made some areas more “like home.” You know sorta Art Decomposed. Everything is harsh sharp rock, with living organs in the walls, plus the occasional glowing bit or tortured soul.

BUILDING DESCRIPTIONS

**Hangar Two**

The secondary hangar fell into disuse after the glamour faded from the Tei Tenga bases. It now stores used up equipment, junk, and the room where the soldiers play cards. Sunk into wall of canyon. You can see out a window on the second floor.

The hangar has become grungy since it has fallen into disuse.

**Graphic Description:** Hangar is UAC style. However, since it has fallen into disuse, it is slightly shabbed-out UAC, with the occasional dripline of oil or rust. Not everything is perfectly ordered. Stains on floor of hangar.

**Basement**

Large Storage Area: a lot of stuff on palettes. Storage canisters.

Toilet: standard toilet, three stalls. ♠ Easter Egg: stand in front of toilet close door, wait (if you have speech 'n' sound pack)-peeing sound.

Elevator: standard fare, only one. If you stay on the elevator long enough,
computer voice sounds (“Please do not loiter on the elevator. Thank you.”).
   Dispatcher Desk: desk of the dispatcher.
   Elevators: from hangar bay.
   Monorail: just to depot. One track. You can go this way if you want.

**Ground Floor**

   Hangar Bay: Huge room, with the odd crate. On floor huge 2's and track for landing ship. Crane above. Crane operator booth opposite doors. It may be possible to open the doors after the power is turned on. Two big elevator platforms can lower to basement if power is on.
   Main Exit: Leads on a path to Supply Depot Two.
   Equipment Room: Locked up Forklift thing, Storage stuff.
   Depot Office: Official and messy looking room.
   Break Room: Messy, microwave, cabinets, tables, Rollee™ chairs.
   Toilets: Stalls have swinging doors (to show that off)
   Elevator: to second and basement floors.

**Second Floor**

   ♠ Hangar Control Room: where they meet to play cards. Large crate surrounded by small crates. Cards drawn on top of crate. In this room there should be 4-minus-the-number-of-players bodies on the floor. Can have personal palettes corresponding to who isn't playing. Map on wall with flashing problem areas. Should be at end of hallway, so demons are on your way out. Player starts here.
   Offices: your basic futuristic offices. Desk, screen on wall, cabinets.
   Toilets: need to figure out a generic toilet area to paste everywhere.
   Equipment Room: one of the first place to get items.
   Communications Room: Neat-o computers set into wall. One extruded control desk.
   Elevator: Goes between three floors. Should have up and down and number indicators, maybe a place for lights to go by like in Star Trek.
   Crane Operation: View window out toward crane. Extruded control desk.
   Window in hallway: you can see out onto the surface, and the sky. Perhaps a ♠ here.

**Supply Depot Two**

Still used as a storage depot, but not as active as the main supply depot. Holds lots of stuff.

   *Graphic Description:* The supply depot is UAC, in normal UAAF shape because stuff is still routed from here to the other buildings on the base. The monorail tunnels are dull and utilitarian.

**Basement**

   Monorail Switcher: from hangar two the underground circuit's two rail system.
   Storekeeper's Office: The guy who actually dispenses materiel.
   Guard/Operator Desk: Controls access to monorail switcher and elevators.
Ground Floor

Storage: Huge rooms, possibly crate maze, or at least important stuff hidden behind crates. Equivalent of a motor pool is here. Health items hidden in maze. Massive freight platforms travel to second floor and basement.

Second Floor

More storage, with maze containing storage crates with weapons. Outside, part of the running track rests on the building.

Waste Processing Facility

Processes all the waste for the whole facility, splits it into water, nutrients for the lab's gardens, solid fuel, and a bit of unusable waste which is either jettisoned from the dome or used by the cook.

*Graphic Description:* This is UAC: pristine on the upper level, but basement is very grungy near the gross parts. They try to keep it clean, but you know.

Basement

Basement tunnel to the Mess Hall. Huge vats of processing waste. Too bad we are not in Smell-O-Vision. Billions of bacteria are converting the waste to nicer substances. Waste processing tanks are large, round, flat deals with a large arm that slowly traces the radius of the tank. (If no animation, then just bubble the liquid a bit like it is moving.)

Ground Floor

Offices are quite spiffy and neat, in direct contrast to the basement.

Enlisted Quarters

Where all the grunts, including our soldiers, sleep, shower, and shit. Have their names on some lockers, perhaps, or have the lockers respond to them. There are five soldiers for each shower and toilet.

*Graphic Description:* UAC, but less nurnie covered, because it is just a box to stick people in. Each desk unit will have electronics, but walls are walls.

Ground Floor

Murphy Beds, Murphy Desks, Lockers, Showers, Bathrooms, Tons of possessed humans. Lots of dead guys. Elevator to roof. Some items in lockers. Horrible massacre in shower. There is an access hallway to the monorail system, used to transfer laundry.

Second Floor

An elevator goes down to the quarters. Control box by it. There is a running track going from here to the training center. They want to keep all the grunts out of the way, and maintain space efficiency.

Tower

Communications tower, this contains a huge antenna, comm equipment, and soon. This is usually inhabited by robots (non during the game, or at least game one), and is just jam-packed with dangerous technology (as underneath the efficiency of the UAC design, the nuts and bolts are sucky, from committees and
cost-cutting (profit-increasing) measures. Also, only robots are gonna see it, right?

Graphic Description: This is UAC, but is only meant to be traversed by service robots. The foolish person who enters will find tech dangers up the wazoo. Electrical flashes, fields, and many other problems are in here. This is really what the UAC stuff looks like underneath the surface. Check out them circuit boards, then futurize 'em, dangle some dangerous wires from the ceiling, and you got the idea.

Ground Floor
Supervisor Room: One supervisor is here to keep a human in the loop for all the robotic maintenance, to guard the place, and to handle special situations.
Maze: This is just one intense maze of tech problems. The player, if brave, can make it to the Robot Elevator Tube. On the way are many demon corpses.

Second Floor
The second floor houses even more horrible tech traps. Some demons are here, wounded already. Can they stutter-walk programmatically? Anyway, you must deal with tech-traps and demons. In a part of the maze is a CRT running through communications messages, some detailing very criminal proceedings by the UAC.

Basement
Tech traps, demons, and at the end of it, an awesome weapon. Either the missile launcher, or tons of heat-seeking missiles for it. Probably the latter—we want everyone to see the cool missiles.

Recreation and Training Center
Where the approved recreational activities take place, and where the soldiers train.

Graphic Description: This is really high tech and cool. Everything is very efficient and some bits of the basement are actually stylish. UAC plus some sense of style.

Basement
This contains the recreational facilities and the chapel.

♦ Chapel/Theater: Hourly sermons of different religions, and wall panels are changed to the style of that religion by operating a control in the corner.

Enlisted Club: Contains place for drinking, plus a video game place in the corner. The vidwalls do not operate until the power is on. Could have demos of future Id games/projects, like Aliens and Movement.

Officers' Club: Contains drinking area and place for gambling. You cannot enter this area without the Colonel's Hand (Officers' Quarters). There's a Stim-Pack cache and a neat collector's pistol, if we can have weapon quality. If not just some cool stuff, even if it doesn't fit.

Storage Room: Accessible from the hallway or the kitchen. Contains supplies for the kitchen and chapel.

Club Storage: Contains alcoholic supplies, Stim-Packs, crates, tables, chairs, and so on.

Monorail: Connects to Control Center.

Big Elevator: Goes to Training level and up to track.
Ground Floor

Entrance: Check-in Desk, entrance to Men's and Women's lockers. Behind desk is access to big elevator.

Men's and Women's Lockers: Locker rooms. A few open cabinets may have supplies in them. Access to big elevator, so they can go to the track.

Gym: A bunch of gymnastic equipment, exercise floor, etc. are here. Unrenderable ones could have pictorial symboled cabinets that are locked.

Shooting Range: If the player shoots at a target, demons come out of the darkness behind it and attack.

Therapist: Hot tubs, rub down tables, etc. for the injured soldier. One for women, one for men. (You know, in Display PostScript, that looks like "the rapist.")

Simulator: Huge screen simulator, probably can't get it out of title loop, because that would require a lot of art. One for women, one for men.

Weight Room: Futuristic extruded Nautilus stuff that is renderable.

Aerobic Training Room: Big area, too bad we can't do mirrors (problem without player anims in download anyway).

Second Floor

This is a track area, with jump pits, dash tracks, and the big running track. (Can we mess up the sand in the jump pit?)

Mess

Where everyone eats. 'Mere are kitchens, and a pipeline to the Waste Processing Plant.

Graphic Description: This building houses both messes, the kitchens, and the laundry. It is UAC, and the walls are about as sparse as the quarters. The halls look cool, because visitors might walk through them.

Ground Floor

Large mess halls (the smaller for the officers) plus a tunnel to the Control Center. In the mess halls are elevators to the kitchen.

Basement

Kitchens: Lots of kitchen stuff, cabinets, industrial microwaves. Also, there is a tunnel to the waste processing plant for organic garbage.

Stores: Food storage lockers all over.

Freezer: A bunch of frozen guys, perhaps with frozen blood drippings, who got wounded, tried to hide here, and froze to death.


Monorail: goes to officers' and enlisted quarters. Side tunnel heads to ammo room.

Officers' Quarters

The COs stay here. It's a bit nicer than the enlisted place, and a locked door leads to the Ammo Storage.
**DOOM Bible Section 7**

**Graphic Description:** Similar to the enlisted in overall technology and feel, but this is just nicer to the inhabitants. Stalls in the bathroom for toilets, privacy walls for each bed and desk.

**Ground Floor**

Nice beds, desks, bathrooms, and such. There is an amazingly gross massacre in the quarters. With rotations, there are a bunch of hands impaled on a pike (under a light to highlight it even more), with a pile of hands around it. These are the Colonels' Hands (and many other officers' hands), and they get you into secure areas. All the carnage surrounds it in sort of a blast pattern. Some of it is sprites, some drawn on the floor. I was thinking about a passcard, but this stands out, and is gross and unsettling. The object will be shown on the alternate character status screen.

There's an access elevator to the monorail system (for laundry), but the massacre prevents passage (the door is trashed). There are also guest rooms here for VIPs.

**Personal Storage**

Lucky is the player who figures out how to get in here. There is just lots of stuff here to shoot demons with. You definitely need the Colonel's Hand, the power must be on, and you must find the side passage off the monorail system by the quarters.

**Graphic Description:** The store room is grungy UAC. It isn't techy, and some panels are missing. (Which will be weird, because uncovered holes will actually be patches on the wall.)

**Basement**

.redis Monorail Side Passage: A passage from the monorail system, accessible with power on and the Colonel's Hand. On the walls are cheesecake calendars (how graphic it is depends on what rating the player has chosen). There are crates and storage containers loaded with ammo. A ladder or elevator leads to the upper compartment. (It's a good P.O. for ads, as they will go "I've never seen that!")

**Ground Floor**

The door to the upper compartment is sparking and malfunctioning. There is fancy officer stuff here, including the Sawed-off shotgun, which has a wider radius of damage. An elevator goes down to the monorail area.

**Control Center/Power Plant**

This is the gateway between the everyday side of the base and the restricted, secret, much-coveted-by-the-player side.

**Graphic Description:** Ooh, so high tech UAC. This is the super-functional, important heart of the base.

**Basement**

Contains the tunnel to the restricted side of the base.

.redis Main Power Plant: mazey, full of tech puzzles. Must be navigated to turn on breakers, so power will run to base.
Tool Shop: where everything is repaired (short cut to first breaker here for those with a Colonel's Hand).

Ground Floor
- On the normal side, hallways lead to Depot Two, Rec/Training, and Mess.
- To get through the main security gates, you need a Colonel's Hand. Through these gates are the hospital, the elevators, and a second set of gates for the passage to the other side.
- Hospital: Gee, would there be medikits here? How about a lot of possessed humans, too? Beds, readouts on wall, cabinets, examination rooms.
- Guard Post: guards second set of gates, and coordinates guard activity.
- Offices and Storage: and so, desks and crates. Demon problems, guarding ammo and supplies. Offices handle communications stuff. Could have readout say that something is missing from tower once you get weapons or mess with info CRT.

Lab
- Set up for the study of Fire Dust, the anomaly, the moon, and so on. Also contains some experiments best carried out away from the mainstream.
  
  *Graphic Description:* The lab is mostly UAC, although it was built around the original miners' refinery and processing plant (right half of basement and ground floor).

Basement
- In the basement are some nasty demons. This area is where you must be hit by a nasty demon so hard that you fly atop a ledge. This leads to the Observatory. The entrance to the Anomaly Building is here, loaded with the nasties, as you'd expect.
- Refinery: Some of this is intact. About a third to a half has been eerily taken over by demons and turned into a hellish cavern. From the refinery side, you can just see demon walls blocking the hallway. (Maybe some fire dust in them.)
- Fire Dust Processing: the Fire Dust was collected and separated here before it was shipped off-planet.
- Science Computer Lab: contains the complex's science-related computers. A lot of NeXT-looking computers.

Ground Floor
- Main labs for studies. Right half of the building is the old building, and tests are being conducted on all of their equipment and possessions to see what prolonged exposure means to people.
- Computer Lab: NeXTs, and screens relate to each part of the base.
- Guard Desk: One last outpost before the gates leading to the Anomaly building.
- Fire Dust Labs: they are screwing with fire dust in every way imaginable.
- Guard Post: Surrounds tunnel to Anomaly building. Need a Colonel's Hand.
(Many of the hand-access doorlocks will have bloody handprints—demons ain't stupid, either.)

**Second Floor**

- Gardens, both hydroponic and terraformed. Provides some of the base's food supply. This area is mazey and obscured by plants, so it is scary!
- Experiment Labs: labs here are dedicated to anti-matter weapons, fusion weapons, nuclear weapons, radiation tests on animals, and incredible weapons research.
- Gate to Observatory: to get over this gate, you must do something very clever. This combined impact will launch you over the gate. A control on the other side opens it.

**Observatory**

- It is an observatory, but full of nasty demons and lots of treasure. Imps got here easily, and have set up their supplies here.
- *Graphic Description:* This is UAC covered with demon stuff.

**Ground Floor**

- There are extruded computers and a bunch of metal that led as a stairway upstairs (where you can never get). All the stuff is covered in demon hieroglyphics and goo. An elevator leads down.

**Basement**

- Once a store room, there are a bunch of powerups and weapons. Some powerups don't help, because they'll wear off before you get back to use them, unless you run to the elevator past the demons in the room.

**Supply Depot One**

- The main supply depot everything that comes off a ship is stored here, then routed through the underground tunnels to the other buildings.
- *Graphic Description:* This is UAC, but more functional, and dingier as you get to the back of the storage areas. Bigger hangar, this contains a big crate maze full of awful demon traps and powerups.

**Basement**

- Access to the underground tunnel network is here.
- ⊗ Monorail, Two elevators, guard desk, Storage Cage, and Offices.

**Ground Floor**

- From the Control Center, you pass by an office, two large elevator platforms, a guard desk, and can see the storage cage and anomaly gate and guard post.

**Second Floor**

- Two guard posts and two big elevator platforms dominate the main room that leads to the main hangar, whose entrance is fried and unreachable, unless we just want to have a cool "ship-in-the-bay" photo opportunity.
- Crate Maze: lots of demons and powerups. If we can, I'd like to somehow have a survivor here, who runs from the player, and speaks of how everyone was possessed. Could be left out of download version, since he'd look like a player.
Then again, nah.

**Anomaly**

In the bowels of this structure is the anomaly itself, and the entrance to the hell canyon. You can only reach this structure from the lab's basement.

*Graphic Description:* The top floor is old miner style. The elevator is UAC. Guard emplacements surround it. The walls are just way thick in the building. The lower level starts as a mine and grows more demonic as you near the anomaly.

**Basement**

The caves of Tei Tenga, where Fire Dust was first found and collected. Tons of demons are here, swarming about. The gate and the canyon await the player. Some of the original tunnels are blocked by demon goo, making the way circuitous. Luckily, there are signs and sections to help you. Horrors await around every corner. Fire dust covers the walls near the anomaly. The hall to the Canyon glows red. The canyon is frightening demonic rock.

Canyon: here are the two Bruiser Brothers demons. Defeat them and you win!

**Ground Floor**

Guard emplacements, an elevator, and thick, concrete walls.

**Main Hangar**

Where ships usually fly in. You can here from Supply Depot One, if you find the access tunnel. There's a lot of neat junk in here.

*Graphic Description:* This will probably be cut, so I won't waste time on describing it.

**Basement**

**Ground Floor**

You can get to a window and see a cool ship, but you can't get to it 'cause then there would be rotations...

**Second Floor**
7.3.2 DOOM OBJECT GRAPHICS: Episode One

This section will show all the things that need to be drawn for objects in Episode One. It will list them in three categories: Vital, Desired, and Non-Vital. Vital graphics must be completed for the game to be completed.

Screens/Pix
V Title Screen
V Credits pic
Intro Cinematic
  V Moon surface
  V Four players sitting around crate playing cards (background, foreground)
  V Foreground players in silhouette, backwall, elevator opens anim
N Close-ups of each of four player’s eyes
End Cinematic
  V Hell skyline
  V Four (masked pix) faces of people, perhaps with hair flapping...
Choice Screens
  V Four small pix of faces (4 x 4 ebes)
  V Four standing pix of people (5 x 3 ebes)

Weapons (Floor items and helmet view window items)
V Knife
V Machine Pistol
D Officer’s Pistol (nice shiny pistol, could be wall patch)
V Shotgun
D Sawed-off shotgun (hidden in personal storage)
V Automatic machine gun
V Missile launcher
V 10-Bullet Clip
V 4-missile Cartridge
V 4 Heat-seaking missiles cartridge

Gettable Items
V Stim-Pack
V Medikit
V Blood receptacle
V Dagger
V Chi Gem
V Unholy Bible
V Soul Sphere, Jar
D  Infrared Scanner
N   Sonar
V   Three levels of armor
N   Demon armor
V   Four different shield packs
N   Lots of demonic shapes large enough to have two letters on them (will have hieroglyphics on them)
V   Lacerated bloody hand

Object Sprites
V   Rollee™ chairs
V   Storage Canister (Use it, and it collapses, revealing contents)
D   Crane on ceiling
V   Tables
D   Oval cylinder tanks to be seen off in distance in parallax
V   Dangling wires
V   Electrical zapper thing on ceiling (anims so you know if its active)
V   Bunch of destroyed, bent metal things (garbage that blocks your way)

Animations
V   Puff of smoke and crate chunks animation for blowing open crates
V   Beefy chunklets flying off missile-exploded enemies
V   Shot hits object
V   Shot hits enemy
V   Shield hit by something it can deflect (1st and 3rd person view)
V   Shield overloaded (1st and 3rd)
V   Sparking of an electronic thingy shorting
V   Storage container collapsing
V   Gate
V   Spinning black demon head (does damage to you if it hits)

Patches
V   Demon hieroglyphics
V   Wall damage
V   Bloodstains
V   Bloody handprints
V   Open panels
V   Rust oil (for older stuff)
V   Switches
V   Big breaker switch
V   Buttons
V   Hand access pads
V   Player on local map on wall
DOOM Bible

Section 7

V Flashing area of problems
V Pictorial signs of all the places (Hangar, Depot, Storekeeper, etc.)
D Symbolic pix of different religions
V Nudie calendar on wall (versions for each rating level, scaled GIF)
D Vidgame screens

Extruded Shapes
V Ceiling-tall stack of storage crates
V Storage Crate (shoot it, destroys it and contents spill)
V Crate with cards on it
V Bathroom (stall, bench, toilet, door, hand dryers)
V Desks (screens inset, light non-functional drawers)
V Control consoles
V Computer banks
V NeXTs extruded out of desktops (maybe Cubes on floor)
V Beds
V Washers/dryers
V Control box for platform
V Benches for locker rooms, other places
D Science experiment containment blocks

Floors
V Four to eight generic floors
V Metal with lights on side
V Monorail track
V Monorail switcher
V Big 2 for hangar
V Track in hangar
V Moon surface: gray-brown
V Pathway between buildings
V Inside cabinet
V Running track surface
V Running track edge
V Tile floor for bathroom
V Waste processing vats
V Shower drain

Ceilings
V Four to eight generic ceilings
V Metal with lights on edge
V Metal, lights in middle
V Fluorescent lights
V Inside cabinet
V Shower ceiling
Walls

UAC
- Metal walls: four to eight tech types
- Metal walls with big UAAF Logo
- Metal walls with panels
- Metal walls with base map
- Outside of buildings
- Cabinets
- Lockers
- Inside elevators (walls, panel, maybe place for lights to go by)
- Monorail Tunnel walls
- Freezer Door
- Microwave, drink machine in wall
- CRT w/increditing text
- Bared electronics walls
- Vidwalls for Enlisted Club
- Cabinets and bar over each other for clubs
- Large vidwalls for simulator
- Privacy walls for officers
- Ladder (probably in 3)
- Throbbing power core-type walls
- WA to have big breaker switch on
- Windows (so you can see bay, etc)

Mine
- Concrete walls of anomaly enclosure
- Gray wall
- Brown-gray wall
- Red-black wall
- Mine supports

Canyon
- Moon canyon walls (at least two different ones)
- Starry sky
- Hell canyon walls

Doors
- Double door: ten-feet wide
- Three-feet wide
- Two-feet wide
- Elevator: Split four feet wide
- Elevator-. Split eight feet wide
- Toilets: swinging doors to stalls

Actors and Related Sprites
V Player
V Possessed Human (could put new clothes on and digitize for registered)
V Massacred humans
V Pile of hands with pike in center stuck through a bunch of hands (40-60 hands)
V Imp
V Demon 1
V Demon2
V Boss
V Dead players at beginning
V Dead demon on floor
7.3.3 DOOM SOUNDS: Episode One

This section lists all the digitized sounds. They are categorized by Download, Vital, and Non-Vital.

V Knife Swipe  
V Knife Hit  
V Pistol Shot  
V Shotgun blast  
V Automatic Machine Gun burp  
V Missile Launch  
V Bullet Hits Wall  
V Bullet Hits Metal  
V Bullet Hits Glass?  
V Item blows up  
V Shot hits monster  
V Door open  
V Door close  
V Elevator at floor  
V Switch flip  
V Walking on gravel  
V Maybe walking and running (would add a lot of realism to feel)  
V Player hit  
V Player hits wall  
V Player hits floor  
V Rollee™ Chair rolling  
V Rollee™ Chair hitting something  
V Warning klaxon  
V Demon roars (maybe animal roars backwards or overlaid)  
V Big demon hooves walking  
V Demon dies  
V Guy dies  
V Big ceiling-extrusion press slamming down  
V Electric spark zapping  
V Sound of Buddy being ripped in two  
V Elevator hum  
V Elevator platform moving  
D Waste plant arm sweeping

Speech (we should get the NeXT lady for these)  
V Panel, Bad Hand: "Access Denied-Officers and Essential Personnel Only'
V Panel, Hand OK- "Access Granted"
V "You are here."
V "Power Failure. Please send a maintenance supervisor to the power plant."
V "Danger-This area is unsafe."
D "Warning: radiation leak. Please call HM team." (Hazardous Materials)
V "Second Floor"
V "Ground Floor"
V "Basement"

D Speeches in intro and outro cinematics.
7.4 MAPS

Here are the episode one maps.

Level One: Secondary Hangar

!7 Start of Level
1 Dehuman
2 Dehuman
3 Demon troop
4 Switch
5 Demon troop
6 Shotgun
8. **Episode Two:**

8.1 **Story**

**Episode Two: Lost in Hell or To Hell and Back**

You explore. In the distance you see a great dark edifice. You must make your way there and try to find a way to escape.

You fight your way through many aliens. Once you reach the edifice, you find a gate guarded by a forcefield. You lead a big boss guy there and shoot him, buffeting him backward into the beam, destroying it. You go through the door and get to the gate. You storm through and make it back to your own universe, only to find you're back on Tei Tenga, and the demonic aliens have taken over the lightside base.
8.2 Actors

These actors appear on episode two:
8.3 Unique Bits

Unique to this episode are the following things:
Here are the episode two maps:
9. Episode Three:

9.1 Story

Episode Three: Knee-deep in the Dead

All all-out war ensues. You battle your way toward the hangar. Once there, you take off in an old attack cruiser. You get powerful readings from the gate area and decide to bomb the gate. You do and both gates flash and break up. Then earthquakes begin. Lava spouts erupt all over. The moon turns into a ruined, fiery ball as you speed off toward the nearest civilized outpost.
9.2 Actors

These actors appear on episode one:
9.3 Unique Bits

Unique to this episode are the following things:
9.4 Maps

Here are the episode three maps:
Episode Four: Armed Assault

Your team is in jail for destroying the planet: the officials denied tampering with the forces. You've been promised release as soon as it blows over. Then they recruit you to explore another gate that the military has opened on the small moon of ???. The squads they've sent in have lost to the forces there. Demons from the gate have stolen a new weapon and you've got to get it back. Once there, you travel hell and find the weapon ... and it's attached to a huge techno-demon. You defeat him and cut the weapon off, and find its energy systems non-functional. You go outside and head for the gate. When you return to the moon, the entire base is covered with grotesque demonic goo.
10.2 Actors

These actors appear on episode four:
10.3 Unique Bits

Unique to this episode are the following things:
10.4 Maps

Here are the episode four maps:
11. Episode Five:

11.1 Story

Episode Five: Base Instinct

You fight for control of the base. At the end you want to get to the ship and get the weapon back. In your way is some awful demon deal which you have to be clever to defeat. You are ready to take off, but decide to do something more permanent. You put a warhead on a troop carrier with a delayed detonation, and send it through the gate. It blows and nukes a good bit of Hell. The big General Demon shakes his head and touches his strange-shaped tactical board, changing that area to the color of our dimension.
11.2 Actors

These actors appear on episode five:
11.3 Unique Bits

Unique to this episode are the following things:
11.4 Maps

Here are the episode five maps:
12. Episode Six:

12.1 Story

*Episode Six: The Final Gate*

You get back and ask the military if there are any more of these holes. They say, well, one more, but it is too small to be significant. You ask to check it out, and want to go in prepared, just in case. They give you your choice of weapons. Your ship lands. Then we see the hole being enlarged by a demon machine. You hit the planet, your pilot is killed by a demon. You find the demons overrunning the base and assault the gate and try to stop them at the source after calling for help, saying you’ll probably have it cleaned up before they get there. You battle strange new demons, and in the end meet the General Demon, who totally slaughters you if you try to attack him. You can find a secret way to get behind him and blow up his machine. You run out and the "cavalry" has arrived. You take off as you order them to nuke the gate and the planet. We see the General Demon angry as the radiation blast flies past him, bathed in its light, threatening to awaken the ancient ones.
12.2 Actors

These actors appear on episode six:
Unique to this episode are the following things:
12.4 Maps

Here are the episode six maps:
13. Commercial Game:

13.1 Story

Commercial: Chaos Awake

At the start of the game, we see our team on a reunion vacation. Meanwhile the General demon is awaking the ancient demons. Back on Earth, they see the horizon change color. Switch to the General arriving with floods of demons, telling his children to go play. As the world is fighting them, you are sent as a strike team. You fight your way to the demon's palace and confront him, he announces his plans and throws you in a cage to watch the destruction. The player must shoot a machine nearby which explodes and knocks the cage from its perch. He sends a few demons to round you up. The player has a short while to act. The General Demon's gate opening machine is there. You can see a gauge which he demonstrated how he can play with the aperture with a giant control atop the machine, but he only messed with it in one direction. Also, there is a gap in the machine which sparks intermittently. If you shoot a projectile into the gap, it sparks constantly and the readout starts moving to the inverse side, the General goes "What?" as the gate closes and the dimension starts bending inward. The Ancients are sucked into the machine, and the General is sucked in after trying to fire magic at it, all with horrible gibbly mess. The dimension is pulled into the machine. Once it touches the machine, the machine starts to blow. Briefly, you see the aperture gauge opening again, then there is a flash.

On Earth, where the gate was we see a big gibbly squirt from the gate which flashes from existence. After a long pause, we see the team break the surface, covered with gibs. They look at each other and say something incredibly funny.

At the last, we see them horribly be-medalled, then back on vacation. See flash on horizon, they look at each other, then rain starts falling. They laugh. The end.
13.2 Actors

These actors appear on the commercial episode:
13.3 Unique Bits

Unique to this episode are the following things:
13.4 Maps

Here are the commercial episode maps:

14.1 Weapons

There are many weapons in doom (with color used for personal palette of player):

Knife (gray). Attachment to the machine pistol. Does minimum damage, more on back attack.

Machine Pistol (violet). One shot at a time. Has knife attachment for close combat.

Shotgun (blue). One shot at a time. Much more powerful, wider target range. Heavy recoil.

Automatic machine gun (green). Multiple-shots of pistol-level damage.

Missile launcher (yellow). Shoots very damaging missiles. Large Recoil.

Added in Episode 2:

Dark Claw (black). Demon weapon that casts a dark cloud of tortured essence. Silent but deadly.

Added in Episode 3:

Probiectile (orange). Minimal damage, but gives readout on enemy.

Added in Doom 4-6 are:

Spray rifle (brown). Multiple shots in a 600 are. Powerful as shotgun, but spread out more. Shotgun recoil.


In the commercial game, we have the final, rare weapon:

Unmaker (white). Demon-tech weapon that hurts pure demons a lot, demon-humans very little, tech demons some. Made of demon bones.

Ammo is required for weapons, of course, so here it is!
Bullets. Used by, pistol, shotgun (gamism), machine gun, spray rifle.


Missiles. Missile Launcher.

Killed humans. The Darkclaw and Unmaker feed on human souls. Killing possessed humans or hellslaves allows the weapons to feed.

14.2 Useful Items

There's a lot of useful stuff in Doom. For instance, we got yer healing:

Stim-Pack. Provides small boost to health -- it keeps you going until you can get real help.

Medikit. Provides good bonus to health.

Soul sphere. Contains the life energy of a human soul (and thus, it is a 1-Up)! Could become another shape if this seems too wolfish.

We got yer treasure:

Blood Receptacle. Gold bowl used in sacrifices.

Dagger. Also used in sacrifices, this knife is black and red.

Chi Gem. Drops from true demons once they die, valuable item. Colors denote aura magnitude (read, how many points you get).(Also, it's a pun-"Chi" is pronounced "key.")

Unholy Bible. Found only in Hell, this is a tome of great evil and holds some knowledge of the ways of demons (if studied for awhile-i.e. player doesn't have time to use knowledge). Well-guarded.

And, o' course, we got yer powerups:

Detectors/Enhancers:
AutoMap. Maps the current area for you, retains map of where you've been.
Infrared Scanner. Allows you to see enemy through walls, in dark, invisible
demons (in later episodes).
Sonar. Allows you to see all exits, obvious and secret.

Armor:
Duty armor: will take first ? health points away from damage to wearer.
Guard armor: will take first ? health points away from damage to wearer.
Battle Armor: will take first ? health points away from damage to wearer.
Demon armor: Will take all damage, but a bit of health leaves at every hit.

Energy fields (very high damage can overload them):
Beam shield. Lessens effects of energy weapons.
Disruptor Shield. Eliminates effects of energy weapons, save for the BFG.
Deflector Shield. Deflects grenades and missiles.
Ban shield. Prevents all solid weapons from hitting.

Both armor and energy shields take damage when hit, until they are no longer useful.

Other protections:
Shockshield. Acts like a deflector shield, but creatures you bump into suffer electrical shock damage. The shield is temporary.
Shadow Cloak. This makes you temporarily invisible.
Chaos Field. Makes monsters nearby fight each other.

14.3 Interesting Items

Episodes 2-6 and the commercial game will have items that fill out the story, and give the game have a sense of richness.

Some ideas: memos, notes, clothes, signs of inhabitance, junk, familiar but damaged items, etc.
15. DOOM Press Release

Copy the following Text into documents you send. There's a quick blurb, followed by a general press release. Lastly, there is a full-blown technical overview.

15.1 Blurb

DOOM (Requires 386sx, VGA, 2 Meg)

It's a real-time, three-dimensional, 256-color, fully texture-mapped, multi-player battle from the safe shores of our universe into the horrifying depths of the netherworld! Choose one of four characters and you're off to war with hideous hellish hulks bent on chaos and death! See your friends bite it! Cause your friends to bite it! Bite it yourself! And if you won't bite it, there are plenty of demonic denizens to bite it for you!

DOOM -- where the sanest place is behind a trigger.

15.2 General Press Release

15.3 Technical Overview

See the following pages for the press release and overview.
Coming in 1993:

DOOM

You are one of four off-duty soldiers suddenly thrown into the middle of an interdimensional war! Wave after wave of demonic creatures spread through the research base where you're stationed. You must eradicate the enemy and find out where they're coming from. When you find out the truth, your sense of reality may be shattered!

Later episodes feature a journey into another dimension, filled to its hellish horizon with fire and flesh. Decide the fate of two universes as you battle to survive! Succeed and you will be humanity's heroes; fail and you will spell its doom.

Program Features:

- Fully texture-mapped walls, floors, and ceilings
- Light Diminishing and Light Sourcing—so distant objects are enshrouded in darkness, unless a light source is nearby
- 256-Color VGA graphics
- Status readouts in your helmet
- Tons of punch-packing powerups and wicked weapons
- Explore a seamless world-inside and outside
- Incredible movie-like cinematic sequences
- Available speech pack
- Four players at once on LANS, two by modem
- Six exciting episodes of violent mayhem

DOOM -- the sanest place is behind a trigger.

DOOM

Produced by Id Software, creators of Wolfenstein 3-D. Requires a 386sx PC compatible or better; VGA graphics; 2 Megabytes of memory.
For Immediate Release:

Id Software to Unleash DOOM on the PC

Revolutionary Programming and Advanced Design Make for Great Gameplay

DALLAS, Texas, December 1, 1992 -- Heralding another technical revolution in PC programming, Id Software's DOOM promises to push back the boundaries of what was thought possible on a 386sx or better computer. The company plans to release DOOM in the third quarter of 1993, with versions for the PC in DOS, Windows, Windows NT, and a version for the NeXT.

In DOOM, you play one of four off-duty soldiers suddenly thrown into the middle of an interdimensional war! Stationed at a scientific research facility, your days are filled with tedium and paperwork. Today is a bit different. Wave after wave of demonic creatures are spreading through the base, killing or possessing everyone in sight. As you stand knee-deep in the dead, your duty seems clear-you must eradicate the enemy and find out where they're coming from. When you find out the truth, your sense of reality may be shattered!

The first episode of DOOM will be shareware. When you register, you'll receive the next two episodes, which feature a journey into another dimension, filled to its hellish horizon with fire and flesh. Wage war against the infernal onslaught with machine guns, missile launchers, and mysterious supernatural weapons. Decide the fate of two universes as you battle to survive! Succeed and you will be humanity's heroes; fail and you will spell its doom.

The game takes up to four players through a futuristic world, where they may cooperate or compete to beat the invading creatures. It boasts a much more active environment than Id's previous effort, Wolfenstein 3-D, while retaining the pulse-pounding action and excitement. DOOM features a fantastic fully texture-mapped environment, a host of technical tour de forces to surprise the eyes, multiple player option, and smooth gameplay on any 386 or better.

John Carmack, Id's Technical Director, is very excited about DOOM: “Wolfenstein is primitive compared to DOOM. We're doing DOOM the right way this time. I've had some very good insights and optimizations that will make the DOOM engine perform at a great frame rate. The game runs fine on a 386sx, and on a 486/33, we're talking 35 frames per second, fully texture-mapped at normal detail, for a large area of the screen. That's the fastest texture-mapping around – period.”

Texture mapping, for those not following the game magazines, is a technique that allows the program to place fully-drawn art on the walls of a 3-D maze. Combined with other techniques, texture mapping looked realistic enough in Wolfenstein 3-D that people wrote Id complaining of motion sickness. In DOOM, the environment is going to look even more realistic. Please make the necessary preparations.
A Convenient DOOM Blurb

DOOM (Requires 386sx, VGA, 2 Meg)

Id Software's DOOM is real-time, three-dimensional, 256-color, fully texture-mapped, multi-player battle from the safe shores of our universe into the horrifying depths of the netherworld! Choose one of four characters and you're off to war with hideous hellish hulks bent on chaos and death! See your friends bite it! Cause your friends to bite it! Bite it yourself! And if you won't bite it, there are plenty of demonic denizens to bite it for you!

DOOM -- where the sanest place is behind a trigger.

An Overview of DOOM Features

Texture-Mapped Environment

DOOM offers the most realistic environment to date on the PC. Texture-mapping, the process of rendering fully-drawn art and scanned textures on the walls, floors, and ceilings of an environment, makes the world much more real, thus bringing the player more into the game experience. Others have attempted this, but DOOM's texture mapping is fast, accurate, and seamless. Texture-mapping the floors and ceilings is a big improvement over Wolfenstein. With their new advanced graphic development techniques, allowing game art to be generated five times faster, Id brings new meaning to "state-of-the-art."

Non-Orthogonal Walls

Wolfenstein's walls were always at ninety degrees to each other, and were always eight feet thick. DOOM's walls can be at any angle, and be of any thickness. Walls can have see-through areas, change shape, and animate. This allows more natural construction of levels. If you can draw it on paper, you can see it in the game.

Light Diminishing/Light Sourcing

Another touch adding realism is light diminishing. With distance, your surroundings become enshrouded in darkness. This makes areas seem huge and intensifies the experience. Light sourcing allows lamps and lights to illuminate hallways, explosions to light up areas, and strobe lights to briefly reveal things near them. These two features will make the game frighteningly real.

Variable Height Floors and Ceilings

Floors and ceilings can be of any height, allowing for stairs, poles, altars, plus
low hallways and high caves-allowing a great variety for rooms and halls.

Environment Animation and Morphing

Walls can move and transform in DOOM, which provides an active—and sometimes actively hostile environment. Rooms can close in on you, ceilings can plunge down to crush you, and so on. Nothing is for certain in DOOM. To this Id has added the ability to have animated messages on the walls, information terminals, access stations, and more. The environment can act on you, and you can act on the environment. If you shoot the walls, they get damaged, and stay damaged. Not only does this add realism, but provides a crude method for marking your path, like violent bread crumbs.

Palette Translation

Each creature and wall has its own palette which is translated to the game's palette. By changing palette colors, one can have monsters of many colors, players with different weapons, animating lights, infrared sensors that show monsters or hidden exits, and many other effects, like indicating monster damage.

Multiple Players

Up to four players can play over a local network, or two players can play by modem or serial link. You can see the other player in the environment, and in certain situations you can switch to their view. This feature, added to the 3-D realism, makes DOOM a very powerful cooperative game and its release a landmark event in the software industry.

This is the first game to really exploit the power of LANs and modems to their full potential. In 1993, we fully expect to be the number one cause of decreased productivity in businesses around the world.

Smooth, Seamless Gameplay

The environment in DOOM is one big world. You enter and exit buildings, walk around outside, explore underground, take something off a table, and so on. Just like real life. Everything is actual size. You never have to leave the game environment unless you quit or save your first game. And the frame rate (the rate at which the screen is updated) is high, so you move smoothly from place to place, turning and acting as you wish, unhampered by the slow jerky motion of most 3-D games. On a 386sx, the game runs well, and on a 486/33, the normal mode frame rate is faster than movies or television. This allows for the most important aspect of gameplay-immersion.

DOOM will be available in the third quarter of 1993. Our shareware distributor is Apogee Software, P.O. 496389, Garland, TX, 75049-6389. Or call: 1-800-GAME123.
Our commercial distributor is FormGen, Inc. Reach them at: FormGen, Inc., 13 Holland Drive, Bolton, Ontario, Canada L7E 1G4.

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16. Random Notes

These are important, unorganized notes concerning overall design of the game. Anything of real interest to anyone other than Tom will be put in the appendix.

16.1. DOOM Marketing Ideas

Could include "Welcome to Tei Tenga Base" or "Join the UAF" fliers.
Military type caps: DOOM, BEOS, UAF
Uniforms for shows? Get jumpsuit, get patches made.

Rate it “PR” for "Parental Restriction," but we all know what we really mean by PR
APPENDICES

A. Glossary

Aardwolf. A maned striped mammal (Proteles cristatus) of southern and eastern Africa that resembles the related hyenas and feeds chiefly on carrion and insects.

The aardwolf has sort of become the mascot of Id, appearing on Tom's Gotta Lists and the Commander Keen 6 Hint Sheet.

And. Logical operation that evaluates to true only if both operators are true. So if Tom and John are in the office, it is true that no work gets done.

Blit. In general, stuff data somewhere, but usually means draw to screen. Often implies as fast as possible. Usage: "The calculations take little time compared to blitting the whole game window."

Delce. Alfonso's utility to shab together and decompress a file that has been Ice-d onto a bunch of disks. Written mostly in a night, with Tom breathing over John's shoulder, saying things like, "What if they pull the disk out at this point?"

Perhaps the coolest install ever.

DeltaFrac. Cool people know what this means. Right, Adrian?

DoomEd. Tom's name for the Doom Map Editor.

Exclusive-Or. Logical operation that evaluates to true only if only one or the other of the operators are true. So if either Tom or John are in the office—but not both of
them, it is true that someone may be masturbating in the office bathroom.

Hag Spot. Location of the oldest member of Id. Related to the "Tag Spot," the place on a wall corner that Carmack's cat Mitzi suddenly runs at, rubs her declawed paws on, then runs past. Also, the "Shag Spot" is where Adrian is.

Ice. John Romero's dandy Installation Creation Editor. Allows anything that's been zip2exe-D (or whatever) to be chopped up onto separate disks, waiting longingly to be reunited with its brethren.

The new version will use IdPack, and not require that silly Wisconsinite's PkZipper.

IGrab. You grab, we all grab with IGrab. Seventeen projects later, IGrab lies with four stakes and ten silver bullets in its heart. Used by shab companies.

Lumpy. At 2:03am, Oct 20, 1992, we were trying to think of a new name for SGrab, our Vga graphic grabber. Romero said "Lumpy," and it was love.

Muse. Torture in the form of an executable. Oh, yeah, you can edit PC and AdLib sounds in it. And import music. And see a digitized sound import that doesn't do anything. And see funny blue lines march across your screen. And save out five meg sound files. And have two red lines that show the end of the sound. And see a red line and no sound, though you can play it. And have all the maximum values suddenly disappear. All these features, and no damn cut and paste! For a fuckin' year!!! (But i'm not bitter ...)

Patches. We don't need no stinking patches...

Pneumonoultramicroscopicsilicovolcanoconiosis. The longest word in the English language. It means "Blacklung," the disease miners get from inhaling coal dust.

ShowKill. Type "SK filename.LBM" to view LBMS. If you want to get that LBM off your hard drive, press "D".

SK. See ShowKill.

SpeedView. Know as "SVII to CLI typers, SpeedView will view a text file, examine it as hex, search for keywords, and view multiple files. Just type “SV filename.TXT”.

So damn useful.

On the IBM.

SV. See SpeedView.

Ted. The Tilemap EDitor, laid to rest in 1992, after five resurrections. Failing his
System Shock, Ted's dead.

Ted was used in an amazing fifteen Id projects before it was laid to rest. It continues to be used by other outside developers. Ted is like an old friend that passed away -- and messed up memory with its "Display Unused Tiles" function before he left.

So many functions, so many uses, such a slow pattern flood fill -- Ted was where I lived for over a year. It’s time to move on -- though I may bed down with other programs, none will touch me like my first. I feel enough time has passed and I can now admit the truth-Ted popped my Id development tool cherry.

Yes, forty-five functions, twenty-seven hotkey commands, two of which tom used: F9 and Alt-X.

Ted, oh ted, my Belov-ed, i can't get you outta my head. I may now use the tool DoomEd, but i am sorry you are dead.

**WAD.** Composite data file. Means "Where's All the Data?"

**WadLink.** Carinack's name for the WAD linker.
B. FILE EXTENSIONS

Here are the commonly used Id file extensions (as in "Filename.xxx", where xxx is the extension).

<table>
<thead>
<tr>
<th>Extension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.DMx</td>
<td>File for Doom Episode x</td>
</tr>
<tr>
<td>.LMP</td>
<td>Individual Lump file</td>
</tr>
<tr>
<td>.LSC</td>
<td>Script file for Lumpy the grabber</td>
</tr>
<tr>
<td>.WAD</td>
<td>Composite Datafile made of lumps</td>
</tr>
<tr>
<td>.WLK</td>
<td>Link script used by WadLink</td>
</tr>
</tbody>
</table>
C. Utilities

C1. Lumpy

Lumpy grabs and links together lumps of related graphics.

**SCRIPT INVOCATION**

```
lumpy [-s] [-pl filename
    -S       force separate files
    -P       wait for a keypress after each grab command
```

Filename should be the root (no extension) of the picture (.LBM) to be grabbed. The script file (.SCR) is read in and parsed, causing lumps to be grabbed off the screen and saved into an output “WAD” (“.WAD”, as in “Where’s ALL the Data?”) file.

If the -s option is used, or the first command in the script file is "$SEPARATE", the lumps are each saved to a separate file, rather than being combined into a WAD.

**SINGLE COMMAND INVOCATION**

```
lumpy [-pl filename.lbm lumpfile grabcommand (parameters]
```

This allows you to grab one lump off of a screen without a script file.

**SCRIPT FILE FORMAT**

```
; Comments can be uses at the beginning of a line,
; or after a command's parms. Whitespace can be introduced
; anywhere, but a command cannot cross lines.

[$SEPARATE]
```

Force lumps to be saved in separate files, rather than a WAD. If present, this must be the first command in the script.

```
lumpname      grabcommand      [parameters]
```

for WAD files, lumpname must be 0-8 chars.
GRAB COMMANDS

Filename **RAW** x y width height
   An unadorned raw block of pixels.

Filename **PALETTE** [startcolor endcolor]
   The VGA palette, all 256 by default.

Filename **PIC** x y width height [orgx orgy [hitxl hityl hitxh hityh]]
   A planar pic, with optional origin offsets.

Filename **LPIC** x y width height [orgx orgy [hitxl hityl hitxh hityh]]
   A linear pic, with optional origin offsets.

Filename **FONT** startchar endchar [startchar endchar [...]]
   A proportional font, possible skipping ranges of characters. Looks for
guidelines to determine the font height.

Filename **PATCH** x y width height [orgx orgy]
   A post-based shape for 3-D engine.

Filename **PATCH255** x y width height [orgx orgy]
   A post-based shape for 3-D engine, with mask color 255.
C2. WadLink

Wadlink links together lumps from Lumpy and Wads previously "wadded up" by Wadlink.

**INVOCATION**

```bash
wadlink [-b] [-source path] [-dest path] [-script scriptfile]
```

- `-b` Force a full rebuild of the file, rather than a file-bulking partial update.
- `-source path` To place the source for the files in another directory.
- `-dest path` To place the linked file in another directory.
- `-script file` The script name defaults to “WADLINIK.WLN” if not specified.

WadLINK alone will load WADFILE.WLN as the script file, get files from the current directory, and write the output file in the current directory.

**SCRIPT FILE FORMAT**

```plaintext
; Comments can be used at the beginning of a line, or after a command's parameters. Whitespace can be introduced anywhere, but a command cannot cross lines.

$OUTNAME filename
Names the output data file. This must be the first command.

datafile
Adds the given file to the output file. If this is a partial build and the file is present and current in the existing output file, the existing version is used.

$OPENWAD filename
Opens a WAD (composite data file). Data files after this are looked for in the WAD file, rather than in the source directory. Lumpy generates a single composite file for each LBM.
```
$CLOSEWAD

Closes the WAD file. Data files after this are looked for in the source directory. Issuing an $OPENWAD will automatically close an open WAD file.

$LABEL lumpname

Creates an empty, named lump to be used as a marker.

NOTES

During a partial link, if a lump has grown it will be added on to the end of the file, leaving wasted space behind. You should periodically use the 11-B” option to force a rebuild from scratch.
C3. **DoomEd**

DoomEd edits maps used with the Doom engine. Based on the NeXT demo “Draw,” DoomEd has been customized to handle levels, show textures mapped on walls, fill with textures, and so on.
C4. Other Command Line Utilities

SpitWad

Spits out information contained in a wad to text screen. (Pipeable, of course.) It also details wasted space from partial relinks.

`spitwad wadfile[.WADI [startlurap# endlurnp#]]`

All the lumps in the WAD will be listed. You may specify start and end lump numbers.

If there's a need, SpitWad might have the added feature of extracting lumps—but there's not one now.

ViewDo

Takes the Doom viewscreen and finds the exact boundaries. With this info, it sets up data for the program so it will draw within the window.

`viewdo [screenname[.LBM]]`

If no screen name is specified, it defaults to "PLAYSCRN.LBM".

Outputs "VIEWINFO.LMP", which contains screen boundary information.

Names for a utility john never wrote: Checurve, RuleView, Raterra, CurveCop, Anglathe, OhTopos, SeeSlope, Scangle, Scanc (scan contour), Testcurv, Contrace, Slopehed, Curvalid, Polisher, Lathe, Sculptor, Slopeval, Topolish.
C5. Fuzzy Pumper Palette Shop

Allows you to convert captured video images and other NeXT-generated images into a VGA format, move them around, and save them for use on the IBM.
C6. Scripto™

Scripto™ generates grab scripts for use with Lumpy.
D. Random Extremely Important Info Too Small To Rate Having Its Own Section

Fuel

Sandwich Hall hours:
Room:

Pizza Hut Hours:
Number:

Number: 373-9173 (Delivery stops 1 hour before close)

Ni's Hours: N-R, 11 a.m. til 9:30 p.m. F-S, 11 a.m. til 10:30 p.m.
Number: 613-3773

Known Application Bugs

Don't use these functions:

- Image, resize selection: leaves white rectangle, no resize done.
E. Known and Unfixed Bugs

We know these exist, but have not tracked them down yet:

- Bug:
Did ancient architects worship Pi?