**Blitzkrieg 2050**

**Game overview**

The game is located in Berlin which is overrun by robots. Humanity fled to a small world nearby but due the high population, this world has grown too small and humanity wish to return to Earth after two centuries. Earth that was abandoned, has a nano power core located in Berlin that turned animals into robots and recreate new robots when one gets destroyed. Before humanity can return to Earth, they have to destroy this nano power core but it’s very dangerous going there. In 2050 humanity finished making a mech to fight the monsters and power core. The chance to return to Earth lies in the hands of Hans Bähr, the pilot of the mech.

**NPC’s**

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| --- | --- |
| Hans Bähr | Mech pilot |
| Adlersflügel | Companion |
| Mutter Eliza | Mother ship AI |
| Mech Wolf | Enemy |
| Mech Eagle | Enemy |
| Mech Spider | Enemy |

**Genre**

The game is a first person shooter, in a future apocalyptic setting and is meant for children from 12 and above.

**Project scope**

The player plays through the game inside of a mecha suit. The player will get instructional information from the mother ship AI ‘Muther Eliza’. The goal is to destroy the nano power core, which when destroyed will deactivate all enemy units. Destroying the nano power core is considered the boss battle.

The main level is an abandoned city with crumbling buildings and wrecked vehicles, a lot of plants, dirt and cracked streets. It has dark skies and gloomy effects. The level borders are made from junk, fallen buildings, etc. The map is like this because it has overtaken by robotic animals and was left alone for two centuries.

The player starts in a tutorial level before actual starting the game to get used to the controls and abilities. In the main level is a city hall where the nano power core is located, entering this city hall will lead you to the boss level.

There are sounds when moving, shooting, activating and swinging the sword, taking damage, dealing damage. Also there are sounds of the enemies, ambient sound and voiceovers.

**Interaction**

The player moves around with the W, A, S, D and press the Shift for a dash. Jumping will be able with the space bar and looking around by moving the mouse. The player can switch between a gun and rocket launcher by the mouse scroll wheel and shoot with the left mouse button, the player can aim by using the right mouse button. The retractable sword can be used by pressing Q, it will withdraw when you use the gun or rocket launcher.

The player can level up to upgrade the gun, rocket launcher and sword. The extra damage you get from the upgrades is very useful for the end boss battle.

The player has a drone as companion that will guide you and help you attack. It will indicate the locations of health and ammo drops. You can upgrade your companion by collecting Companion Cannister’s that you can find randomly all over the map.

Apart of the animal robots, the player also have to watch out for land mines spread over the map. The player is able to destroy buildings and other destroyable objects. Ammo can be refilled by drops at check points, however rockets are harder to find.

The health of the player is set by the status of the mech, a low health means the mech is almost broken. There are canister containing nano bots as health pickups, which when opened releases a swarm of nano bots who repair the mech of the player.

**HUD**

The HUD shows the inside of the cockpit. It will show you the health of your mech and its shield. The shield will regenerate over time but your health can only be restored by health pickups. The shield displays hexagon pattern when depleted. Upon getting hit a flash will show on the screen, blue when the shield is on and red when the shield is broken.

You will also see which weapon you have selected and how much ammo you have left. There is a mini map and a crosshair.

**Artificial intelligence**

The way of collision detection depends on the situation but will mainly be done with ray casts. The path finding will be done with A-Star.