

Bullet Zone - User Instructions Milestone 3

Title Screen:

The title screen has the account button which allows you to either login with a registered account or register a new account with a username and password.

Once entering a username and password to register, you can press the login button with the same information to log into your account.

Only once you are signed in are you able to join the game by pressing the play button.

In game:

Once in game, the game display appears with your Dropship, Tank and Miner on it, which can be controlled through several different buttons on the screen.

The display consists of normal grass terrain, darker green forest terrain, hilly terrain, gray destructible walls, and red indestructible walls.

The four buttons at the bottom control your unit's movement, with a left, right, down, and up direction. The three buttons with "Tank" "Miner" and "Dropship" change which unit you have control of. For the dropship, the move buttons only rotate.

The tank/miner can only move to a tile next to it if it is facing/facing away from the tile, as the tank can not move to its left or right without turning first.

While the tank can enter the forest terrain, the miner and bullets can not

The miner and tank units can move into the dropship to be protected and heal over time.

Pressing the mine button which appears when controlling the miner will start a mining process that gives differing amounts of credits each second depending on the terrain.

The power ups consist of the purple anti grav crystal (doubles vehicle speed, -.1 fire rate) the green fusion reactor crystal (doubles fire rate, -.1 move rate), the repair kit power up continuously heals, the blue shield generator protects from 50 damage when hitting/getting hit, and the drill damage power up increases hit damage by 50

The thingamajig block gives credits upon pickup.

All of the items spawn randomly on a ten second interval upon joining the game.

When leaving the game, you need 1000 credits and they are taken from your account upon leaving.

The tunnel button appears when over a tunnel entrance represented by a dark dirt spot with light shining on it, or it appears when controlling a miner unit. When pressed over a tunnel entrance terrain, the unit will go to the next layer underneath to another entrance terrain and a subterranean layer filled with dirt, rock and tunnels. If the tunnel is pressed again, the unit will go back up the entrance and go up to the layer it was made on.

There are a total of three layers with two subterranean layers

As a miner, pressing the tunnel button over normal ground will start digging an entrance and deal damage if there is dirt underneath, and do nothing if a rock is underneath. Once the dirt is destroyed or if no dirt is present the entrance is made which connects one layer below.

When moving into/hitting dirt and destroying it, a random material is found underneath between iron (yellow dotted dirt) worth 100 mining credits, Gem (blue dotted dirt terrain) worth 300 mining credits, and unobtainium (multi colored dotted dirt terrain) worth 1000 mining credits.

Button Visibility updates are done when an indestructible wall or rock is in the way of a certain direction of the unit controlled, alongside visibility changes depending on the unit being controlled.

There is a flag button that can be pressed after pressing a tile spot on the game board and a flag will appear in the spot pressed for 30 seconds or until another flag is placed. The flag stays on the board no matter the layer.

Extra credit features:

The tank health is displayed on top of the tank unit as a bar that progresses to yellow and then red the lower the health of the unit.

The spawn tank and spawn miner buttons allow the user to spawn a unit with a new spawn event for the id of the new unit to be updated. The spawn costs 1000 credits to create the unit from the dropship and there can be only 4 tanks/4 miners out at a time.

For this purpose, there is a cheat button labeled cheat in the bottom right to give yourself 1000 credits everytime it is pressed.

When a bullet is close to the controlled unit and you move near it, the screen will flash red to warn you that the bullet is headed for the unit.

The walls and controlled units have three stages of health display that change depending on the amount of health is left, with walls cracking more and more as it gets closer to breaking and the aforementioned color changes for the units.

There is a moveTo button that can be pressed after tapping a cell/spot on the board and the controlled unit will attempt to move to that spot automatically. This is implemented using the command pattern on the server, if any walls or units get in the way of the move to command it will stop.

There is an evade left and an evade right button that can be pressed to move consistently and quickly in the direction multiple times over a short period. This can be used to evade or run away as fast as possible.

The buttons shift and are readable with several different device sizes.

When rotated, the board and buttons are shifted into a separate layout and the gameplay can be continued without interruptions.