

M.E.C.H.A. Bots

(Motorized Expendable Customizable Heavily Armed)

42 Inc.

Team 4

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High Concept

M.E.C.H.A. Bots is a game for the iPad in which players pit themselves against each other as robots battling in fully-navigable 3D arenas. Players will be able to fight their opponents with a variety of weapons and accessories. These fights will be matched over a Wi-Fi connection against human opponents, and players will be able to train their skills against basic AI in a single-player mode.

While players battle, they will be able to salvage parts from their opponents and from the battlefield. Moderate-quality parts will also be purchasable from an in-game store with currency earned in battles. Players will be able to use these parts to build new robots in order to experiment with new weapon combinations and combat strategies.

Target Audience

MECHA Bots is aiming for an older, but casual audience on the mobile market but with enough customizability and features to draw in a more lasting, hardcore crowd.

Schedule

SEPTEMBER

Sept 24th - Milestone 2 Due

First Playable Prototype and Design Document

OCTOBER

Oct 15th - Milestone 3 Due

Alpha Version

Oct 17th - Midterm Review

Oct 29th - Milestone 4 Due

IGF Submission

NOVEMBER

Nov 19th - Milestone 5 Due

Beta Version

DECEMBER

Dec 3rd - Portfolios Due

Dec 11th - Milestone 6 Due

Final Version

Mechanics

Our main model is the control system used in Angry Robots which uses a dual thumbstick interface to move, aim and shoot.



Movement

Players control the robot's position using the left thumb joystick. The camera will follow the robot around as it moves, keeping it in the center of the screen.

Aim/Shoot

Players can aim the robot by using the right thumb joystick. Aiming also activates the current weapon and will start shooting in the direction the player is aiming. Aiming also switches the movement to a strafing mode, keeping the torso and legs facing one direction, but allowing movement around. The camera will also pan slightly in the direction the player is aiming to give a better view of the area they're attacking.

Melee

Melee attacks are controlled the same as the ranged attacks, but in a much shorter distance. Holding down the right thumb stick will start an attack in the direction they are facing.

Shield

A shield gives the player an added Armor bonus to their overall defense. Only a few weapons are coupled with the shield.

Weapon Swapping

The different weapons available to the player will appear as icons near the right thumb stick. Players can swap between weapons by pressing this icon. Weapons of the same type cannot be swapped, but they do have special attacks.

Boost

By tapping the left thumb stick and then holding it down, or by pressing and holding the blue "B" button, the player can engage boosters. The player can disengage boost by letting go of the

left thumb stick. Boost will allow the player to dash further across the field at high speeds for a short period of time. The player will be able to shoot when in a boosted state.

Game Spaces



Title Screen

- Host Game
- Join Game
- Build Bot
- Controls
- Credits

Build Bot

- Customize Parts
- Customize Paint

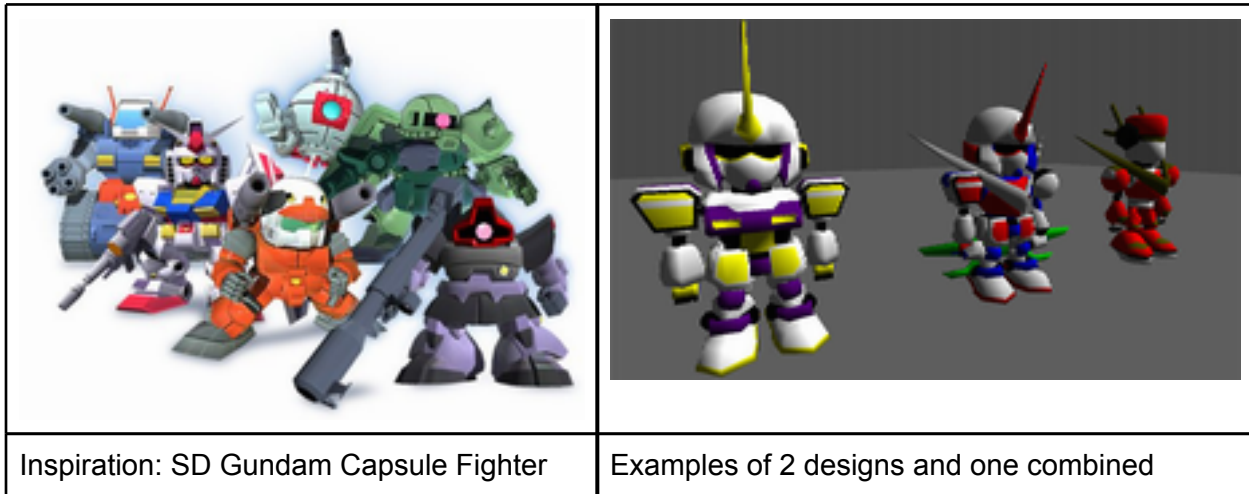
Multiplayer

Host
Join

Arena - Matches take place here

Robot Design

Customizing your robot's parts and loadout



The robots are made up of - parts: Head, Arms, Torso, Legs, Weapon 1, Weapon 2
 Each part has several stats associated with them; one to two that benefit the player and one that negatively affects the player..

Part Stats

Bot Parts

HEAD	Health	Armor	Intelligence	Agility
MST	-15		3	
RFV	-10		2	
MSP	-20		4	
DRI	-25		5	
GTP	-0		1	
LRF	-25		6	
TORSO	Health	Armor	Intelligence	Agility
MST	40	3		-2
RFV	20	1		-0
MSP	30	5		-3
DRI	15	4		-2

GTP	60	6		-3
LRF	50	2		-1
ARMS	Health	Armor	Intelligence	Agility
MST		5	-3	
RFV		4	-2	
MSP		3	-2	
DRI		2	-1	
GTP		6	-3	
LRF		1	-0	
LEGS	Health	Armor	Intelligence	Agility
MST		-2		20
RFV		-3		25
MSP		-1		15
DRI		-3		23
GTP		-0		12
LRF		-2		18



Weapon Stats

(names reflect definition in parts_database prefab)

	Damage	Agility	Melee_Width	Melee_Distance	Mana	Other
Axe	20	2	7	6	5	
Sword	20	2	6	7	6	
Spear	25	3	5	8	4	
Knuckle	15	1	4	6	8	
Scythe	30	3	8	6	3	
Shield	5	2	6	6	10	Armor +4

Flame Thrower	3	1			15	
Machine Gun	5	1			20	
Missile	35	4			2	
Mortar	30	3			4	
Railgun	15	3			15	
Shotgun	5 (x5)	2			8	

Example Chassis

<p>#00-MST Bot Mistbane Styled Terrestrial</p> 	<p>#01-RFV Bot "Roy Fokker" Valkyrie</p> 
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#02-MSP Bot
Michigan Spartan Pride Bot



#03-DRI Bot
Deus Reaper Inferno



#04-LRF Bot
Long Range Fisticuffs Bot



#05- GTP Bot
Gun Toting Peace-maker Bot



Customize Bot

Players will be able to swap out various parts of their Bot that will help increase stats to help them win battles. Player can choose from a stock set of parts when they start the game, but will be able to unlock new parts through battling.



Bot Selection Screen



Part Menu



Part Selection (shown Weapon Right)



Paint Shop

User Interface



Mobile Interface

Players on a mobile device will have two digital thumb sticks to control their movement and handle other actions. They will have several other buttons located near the thumb sticks for quick access (Weapon Swap, Boost, Main Menu). Display indicators for health and ammo are across the bottom of the screen. Player and Enemy lives are displayed on the top. A radar with the enemy position is in the top left of the screen while an indicator for your selected weapon is on the right.

Computer Interface

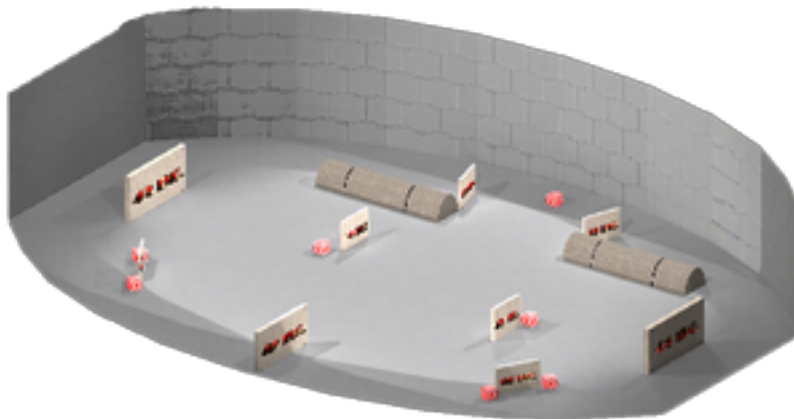
Players on a computer will be able to use the WASD keys to move their robot along the horizontal and vertical axis. The mouse will act as the right thumb stick and give the robot direction. The left mouse button will also be used as the “Fire” command in regards to attacking. Other button shortcuts will be used for actions such as weapon swapping and locking on.

Multi Player

Players will be able to search for games or host their own matches. They can select one of three arenas to fight one other player in.

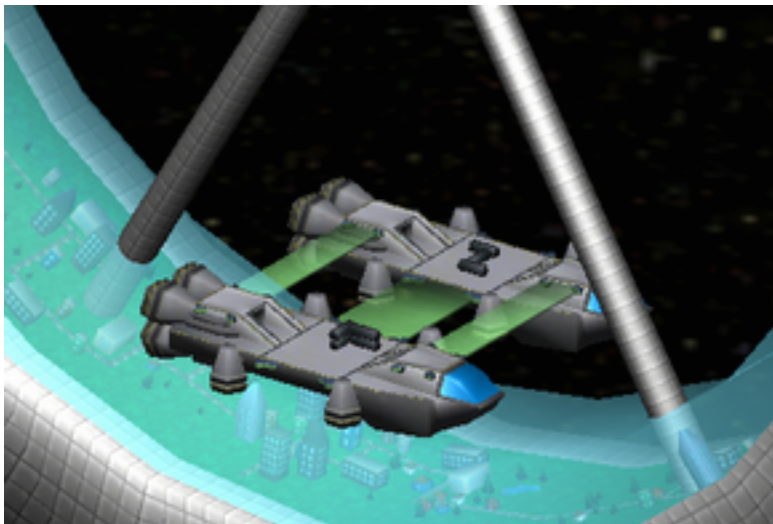
Arenas

Arena - Paintball style closed

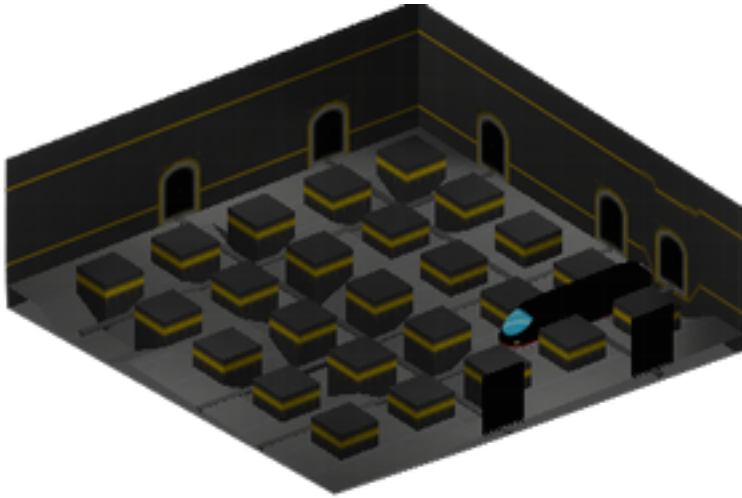


stadium

Space Colony - A platform orbiting a space colony... in space



Station - Fighting in the middle of an active trainyard



Troubleshooting

Unable to connect to other devices

Ensure both devices are connected on the same network. If problem persists, close out of program completely and try connecting again.

Unimplemented Ideas

Single Player

Similar to a tournament ladder (Mortal Kombat), the player will face off against different enemy types. This mode is mostly to help the player hone their skills before being pitted against other human players. Challenges will be a combination of terrain obstacles and enemy encounters.

Enemy AI will be kept fairly simple, consisting of stationary weapons placements that can demonstrate different weapon abilities. Simple moving targets will also be present, though they will follow a strict patrol path. If time permits, we will see about assembling at least one fully autonomous enemy robot that will track the player down and use a combination of weapons against them.

Multiplayer Modes

2 vs 2

Time based match

Capture the flag

Team Deathmatch

Target Lock

By double tapping on an enemy robot, the player can enter Lock-On mode. Lock-On mode keeps the player's robot facing the opposing player and allows for more accurate shooting. The player can disengage Lock-On by either traveling outside of radar range or by swiping on the other player.

Salvage

When a player defeats another player, they receive scrap from the destroyed robot. At the end of the round, the player is given the option to melt down the scrap for a lump sum of money or a chance to try and get a part from the other player.

Charging Weapons

Weapons that would charge up when you push down on the thumbstick, giving you a chance to live up your shot.