

Mech Apex Zero Road Map

Tian Guo, Saim Zahid, Jonathan Yu, Yicheng Chen, Yanting Zhang

March 5, 2018

Introduction

This document contains the road map of changes from revision zero to revision one for the High Concept Document, Requirement Document and Design Document. It also contains a descriptive explanation for the given changes.

High Concept Road Map

This section contains a list of changes from revision zero to revision one for the High Concept Document. The change list has been divided up into the sections of the High Concept Document, if a section does not appear in this document than no major changes have been made. The changes have been summarized into points where minor spelling corrections have been omitted to remove clutter. There is a section called New section where new content has been added

Player Motivation

1. rewrote the player motivation section where the main focus is on player motivation rather than the features of the game.

Unique Selling Points

1. Removed bullet: Level and game session does not have to be lengthy. Players can play between breaks
2. Removed bullet: Stand out in the current market dominated by competitive multi-player games. Avoids the on-line toxicity.
3. Removed bullet: Can be played according to players own schedule.
4. Removed bullet: Its a 2D game, so players with 3D sickness or motion sickness can still play this game. And the controls would be easy to learn and play.
5. Removed bullet: Flexible class systems that allow the player to experiment with different characters with different combat combo styles and dialogue stories.
6. Removed bullet: Multiple playable characters unlocked by beating bosses, players can pick levels they want to start after beating the whole game.
7. Removed Bullet: Achievement system allows player to try to challenge themselves and be competitive.
8. Removed Bullet: Collectible items system keeps players interested in exploring the levels. The items offer changes in game play for players to try out.
9. Re-phrased all bullets to be clearer, shorter and more concise

Features

1. Edited the movement system for only two states walking and running.
2. Removed multiple mobile suites to be collected
3. Rewrote number 8 and is now number 2
4. Rewrote number 7 and is now number 6
5. Removed number 3
6. Rewrote number 2 and is now number 6

New Sections

1. Added an Atmosphere sub section

Design Goals

1. added Fairness as a design goal

High Concept Change Explanation

Player Motivation

1. The original player motivation section focused too much on game features and did not address the player's motivation to play the game

Unique Selling Points

1. Levels and game session have been removed because although it is a feature within in the game it is not a unique selling point as all off-line games have this.
2. have been removed because avoiding online toxicity is a feature to all offline games
3. the bullet had been removed because this feature is universal to all offline games
4. This point is a feature that applies to all games that aren't in VR
5. This feature has been removed because the class system is too complicated for our game and doesn't fit in to our game design of being simple and easy to pick up.
6. The Achievement system has been removed because doesn't fit within our design goals
7. Unique selling points should be phrases that excite customers (or client to fund) into buying our game. They should give a very clear picture on what our game is about and why you should buy it.

Features

1. The game initially had walking, running and dashing but on play test the feeling of running felt too imprecise for the player and was removed for a better game play experience
2. Removing multiply mobile suits to be collected is in the interest of time. Creating new aesthetics of characters is time consuming. That time would rather be spent on the creating more levels and polishing the game.
3. There are no longer distinctions between levels. the term "battle level" is just regular levels within the game.
4. Reworded and removed features such as
5. 6 directional moves and 4 directional moves in the air has been removed in favor of two attack key system one of which for range and other for me-lee. This control scheme is more intuitive to the player.
6. Stated the feature clearly and removed unnecessary explanations

New Sections

1. Added an Atmosphere sub section because it is a required element of a high concept document that was previously missing.

Design Goals

1. Fairness is a design philosophy we wish to uphold because we believe it will make the game more fun and more engaging.

Requirements Road Map

This section contains a list of changes from revision zero to revision one for the Requirements Document.

Regarding requirements 213 and 217, these requirements are added later (hence their requirement number) but belong to the Understandability and Politeness section. Therefore they are located after requirement 204.

1. Removed irrelevant Mandated constraints
2. Modified PUC 3 Interacting with Items with Boolean as input (was key input)
3. Modified PUC 4 Viewing Player and Gear Status to Viewing Player and Status

4. Modified PUC 19 Interacting with Gundam Gear to Interacting with upgrades
5. Modified PUC 22 Viewing Achievements to Viewing Progress
6. Removed PUC 28
7. Significantly expanded core mechanic Functional Requirements
 - (a) FR001 and FR002 Requirements for horizontal movement
 - (b) FR003 and FR004 Requirements for jump action and gravity
 - (c) FR005 Requirement for upgrade item interaction
 - (d) FR006, FR007, FR008, FR009, and FR010 Requirements for viewing player status, items, and upgrades
 - (e) FR011, FR012, and FR013 Requirements for combat actions
 - (f) FR014 Requirement for damage calculation
 - (g) FR015 and FR016 Requirements for pausing and unpausing the game
 - (h) FR017 Requirement for enemy spawning mechanic
 - (i) FR018 Requirement for level boundary
 - (j) FR019 and FR020 Requirements for player taking damage and health points
 - (k) FR021 Requirement for hitboxes
 - (l) FR022 Requirement for returning to Title
 - (m) FR023, FR024, and FR025 Requirements for gameplay modes and selection menus
 - (n) FR026 and FR027 Requirements for pause menu function and layout
 - (o) FR028, FR029, FR030, FR031, FR032, FR033, and FR034 Requirements for enemy behaviour, enemy health scaling, enemy death and rewards
 - (p) FR035 and FR036 Requirements for Player death
8. Added Security Requirements
9. Modified Release Requirement to not be as specific and more general
10. Added additional risks

Requirements Change Explanation

- Change 1: Addressing feedback for Mandated constraints to only include restrictions imposed on the dev team.
- Change 2: Only interaction is picking up items, implemented as Boolean check of box collision between avater and item.
- Change 3 and 6: Equipment/Gear is removed from the scope for this project
- Change 4: Removal of Gear will remove need to interact with Gear, upgrades however are part of the game. Interacted the same way as other items.
- Change 5: Achievements is removed from the scope for this project, a menu for viewing achievements is not needed. Player can view progress of game such as how many levels are completed out of the total.
- Change 7: Original 8 functional requirements were added upon and expanded to the current 36 to encompass all necessary actions of the game, and address functions that were missing previously.
- Change 8: Addressing feedback. Requirement was missing from Rev 0.
- Change 9: Hardware requirements were too specific and arbitrary so we generalized it. Also moved to correct location
- Change 10: Modified risk section to indicate priority for implementation and testing.

Design Document Road Map

This section contains a list of changes from revision zero to revision one for the Design Document.

1. Rephrased, fixed spelling, and restructured document
2. Added index section
3. Added introduction section
4. Added boost meter mechanic in movement section as a way to balance the boosting mechanic. Refer to Revision plan for detailed feedback and analysis
5. Modified health and items section by reducing RPG elements and introduce simple upgrades and recovery items
6. Removal of player gear status screen
7. Add camera offset and reworded explanation
8. Added combat system damage calculation formula
9. Modified item shop and item availability by reducing the selection of items to only upgrades and health pickups (repair kits)
10. Added sketch of new level as mock up
11. Added background music and sound effect section

Design Document Change Explanation

- Change 1, 2, and 3: Increase readability of document and addressing feedback from revision 0.
- Change 4: Boost meter allows player to boost as long as they have positive meter, as a way to balance the boosting mechanic. Refer to Revision plan for detailed feedback and analysis.
- Change 5: Reduce design elements that are no longer scope of project and requirements and simplify the system to better fit the feel of the game.
- Change 6: Since equipable gears are no longer part of the game, the gear status menu should be removed.
- Change 7: Camera offset when moving helps player to visuall identify the orientation of the in avatar. Rephrased sentences to explain the design better.
- Change 8: Provide more detail of how damage is calculated in the game.
- Change 9: Removed the old gear items that are no longer part of the game.
- Change 10: Provide level mock up that was missing from revision 0 and address feedback. Provide info about level design.
- Change 11: Section was missing from revision 0. Addressing feedback by providing choice of asset used and rationale.