

# Mech Apex Zero Road Map

March 4, 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 an explanation for the given change.

## **High Concept Road Map**

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

## **High Concept Change Explanation**

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

## **Requirments 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 (hense 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

## Requirments Change Explination

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

- 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

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

- 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 visually 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.