Immortal Blade

Ian Beard
ian.beard@bellevuecollege.edu
Michael Lablanc
michael.lablanc@bellevuecollege.edu
Yasir Egal
yasir.egal@bellevuecollege.edu
John Sablaon
john.sablaon@bellevuecollege.edu

Scope

We want to make a web based single player turn based RPG using HTML5 Canvas. The scope of the full project is potentially quite large. While perhaps not as massive as some notorious "90 hour RPGs," this project could still be quite the undertaking

For the purposes of building a prototype, however, development will initially be limited to letting users play through a single battle.

Which would play out as selecting a group of characters. The computer generates a group of enemies. Then a character and enemies take turns, selecting actions to eventually defeat the other group until either the player defeats all the enemies and wins or loses when the enemy defeats all of the player's.

A turn for a player's character will start by them generating action points, which then will allow them to do one or more actions, such as attack or heal, until they are out of action points. At which point their turn is over, and the next character or enemy will get their turn.

Business Narrative

General Specs
- The game will be a single player turn based RPG. The prototype will mainly focus on the combat system.

- The game will use HTML5 Canvas for the visual elements. Pre-built game engines may already exist for HTML5, this will be researched early in development.

- The game will use Node.js and React (Subject to change)

- The database will use MySQL.

- The prototype will allow users to select both the player characters they want to use, and the enemies they would like to fight.

Combat System

Players will win after incapacitating all opponents. They will lose if all of their characters are incapacitated

Characters (playable or otherwise) have 6 main stats:
- Strength (determines physical attack damage)

- Willpower (determines strength of magical attacks and increases resistance to mental status ailments)

- Dexterity (determines accuracy of physical attacks)

- Focus (determines accuracy of magical attacks)

- Defense (reduces damage of incoming attacks and increases resistance to physical status ailments)

- Agility (reduces accuracy of incoming attacks)

Weapons will have a block rate and attack power assigned to them. Attacks will have damage values, accuracy ratings, and critical hit rates assigned to them.

Characters have 4 resources to manage during battle:
- Health (Reduced by taking damage from attacks, gained by healing. Characters are incapacitated when their health reaches 0.)

- Action Points (Characters gain a number of action points each turn, up to a certain limit. These points are spent to perform actions, like attacking or casting spells. Characters may take as many actions as they like per turn so long as they have enough points to spend <Limited to one attack per turn>.)

- Essence (Used to cast spells. Rather than a number of points being spent, Essence is accumulated by a character when they cast spells. If they continue to cast spells after they have reached their maximum amount of essence, they will take damage.)

- Tension (Represents a character's morale, measured as a percentage value. Tension is gained by scoring critical hits or from support spells, and is lost by missing, taking damage, or from certain enemy skills. High Tension increases accuracy and grants access to powerful actions, low tension lowers accuracy and prevents some actions from being performed. Tension also affects how resistant a character is to mental status ailments.)

Enemies will target characters based on their level of aggression (Aggro) towards them.
- Aggro towards each player controlled character is tracked separately by each enemy.

- Aggro towards a character is gained when they deal damage (only gained by the enemy taking damage), cast spells, or when they use abilities that explicitly state that it increase aggro.

- Aggro is lost when a character takes damage (only the aggro towards the character taking damage) or uses an ability that explicitly states that it decreases aggro.

- Players will be able to arrange their characters into a front and back battle line. Characters on the back line will gain aggro at a reduced rate, but will be unable to perform melee attacks.

User Stories/Tests

1. As a player, we need to be able to see which character and enemies we can select, so we can establish characters and enemies before starting the game.
   Test: List of characters and list of enemies displayed on screen

2. As a player, we need to be able to select which characters and enemies we want to play with and against, so we can start the game.
   Test: Characters/enemies can be added to list of selected characters/enemies

3. As a player, we need to be able to start the game after selecting the characters, so the game enters the gameplay.
   Test: The screen displays the battle field and battle menu

4. As a player, we need to be able to view all characters and enemies on the screen, so we know that the game has started.
   Test: The battle starts will all selected characters/enemies present on the screen

5. As a player, we need a visual indicator on the screen to reference a character, or enemies turn so we know whose turn it is.
   Test: Visual indicator for who's turn it is should be on screen

6. As a player, we need to be able to pause and resume the game, so that the game will stop and continue as requested.
   Test: Pause menu can be opened and closed at any time

7. As a player, and when the game is paused, we need to be able to restart the game at any point so that the current game will end and start a new game with the same characters starting with the initial state.
   Test: The battlefield is reset to its initial state, with all selected characters and enemies on screen

8. As a player, we need to be able to exit the game at any point, so that we can select new characters and start the game over.
   Test: The player is returned to the start screen

9. As a player, and when the game is paused, we need to be able to view the controls so we can make a selection
Test: The controls are displayed on screen

10. As a player, and when the game is paused, we need to be able to review the tutorial of the game mechanics.
Test: The Tutorial can be opened and closed via the pause menu while playing the game

11. As a player, we need to be able to access the tutorial from the selection screen, so that we can review the game mechanics.
Test: The tutorial can be opened and closed from the select screen

12. As a player, we need to be able to see the health of all characters and enemies on the screen, so we can strategize for my next play.
Test: A health bar can be seen below each character/enemy on screen

13. As a player, we need to be able to see which enemies are targeting which character, so we can anticipate the damage and prepare my next steps.
Test: A visual indicator for enemy aggro can be seen next to each enemy

14. As a player, we need to be able to view the character's action to perform, so that we can select one from the menu to execute.
Test: Available actions can be seen and selected via the battle menu

15. As a player, we need to be able to view the status of a character, so we can decide what my next move will be.
Test: Characters can be selected from the battle menu, which displays a popup showing their current status

16. As a player, we need to be able to select a valid target, so the character can perform the action selected to the target.
Test: Players should be able to see a visual indication of who they are targeting with their abilities

17. As a player, we need to be able to select when to end the turn based on available action points, so we can end the turn strategically.
Test: Performing a single action should not end the turn

18. As a player, we need to be able to view the status and resources of an active character, so we can decide what actions to perform in the next play.
Test: The "resources" of the active character should be seen next to the battle menu

19. As a player, we need to be notified with a victory screen when all enemies are defeated, so we know the game is over.

20. As a player, we need to be notified when all of the player's characters are defeated with a defeat screen, so we know the game is over.

21. As a player, we need to be able to select to play the game again when it ends, so that the game will start over from the beginning.