

## Test Plan

Team 16 – Dining Defense

Abdalla A Almazmi (aalmazmi), Anna Benjamin (benjamia), Michael Andrew Goldman (goldmanm), Mason P Herhusky (mherhusk), Bangqin Lin (lin461), Wei Zhang (zhan1613)

1.
  - A. Game opens, opening game, severity 1
  - B. Click on the executable of the game
  - C. Game opens to main menu with options “Start new game”, “Resume game”, “Highscores”, and “Settings”
- 2a.
  - A. Starting a new game, main menu, severity 1
  - B. In the main menu, Player clicks on “Start new game”
  - C. Game Begins and the player’s selected castle spawns along with the enemy’s selected castle.
- 2b.
  - A. Resuming game, main menu, severity 2
  - B. In the main menu, Player clicks on “Resume game”
  - C. Player’s previous game loads up and the player can continue playing
- 2c.
  - A. Accessing personal highscores, main menu, severity 3
  - B. In the main menu, Player clicks on “Highscores”
  - C. List of Highscores pops up and the top scores achieved on the player
- 2d.
  - A. Accessing game settings from main menu, main menu, severity 2
  - B. Player clicks on the button "Game Settings" on the main menu screen
  - C. Game presents the main menu and then after the user clicks "Game Settings" the game presents the game settings screen
3.
  - A. Adjusting music and volume, changing settings, severity 2
  - B. Player clicks on preferred volume level or music setting
  - C. Game presents the chosen volume of the game or music setting until the volume setting is changed again
- 4a.
  - A. Pausing the game, Pause menu, severity 2
  - B. Player clicks on “pause” icon on top right of screen.

C. Game will pause and the pause menu will pop up.

4b.

- A. Resuming the game from the pause menu, Pause menu, severity 1
- B. Player clicks the "Resume" option in the pause menu.
- C. Pause menu will disappear and the game will continue.

4c.

- A. Restarting the game from pause menu, Pause menu, severity 2
- B. Player clicks the "Restart" option in the pause menu.
- C. Pause menu will disappear and the game will restart.

4d.

- A. Accessing the Settings from pause menu, Pause menu, severity 2
- B. Player clicks the "Settings" option in the pause menu.
- C. Pause menu will disappear and the settings menu will pop up.

4e.

- A. Exiting the game from pause menu, Pause menu, severity 1.
- B. Player clicks the "Exit" option in the pause menu.
- C. Game ends and data is saved and the player is sent back to the main menu.

5a.

- A. Correctly places minions, placing minions, severity 2
- B. Player clicks on "select your minions", then picks the specific minion he/she would like to spawn, then clicks on a tile within a short distance of their base.
- C. Game will allow player to spawn the minion.

5b.

- A. Placing minions in incorrect spot, placing minions, severity 2
- B. Player clicks on "select your minions", then picks the specific minion he/she would like to spawn, then clicks on a tile too far away from their base.
- C. Game will not allow player to spawn the minion, message pops up and no minion is spawned.

5c.

- A. Attempting to place minions with insufficient funds, placing minions, severity 2
- B. Player clicks on "select your minions", then picks the specific minion he/she would like to spawn, but the player does not have enough money.
- C. Game will not allow player to spawn the minion, message pops up and no minion is spawned.

6a.

- A. Correctly places defensive towers, placing towers, severity 2
- B. Player clicks on "select your towers" and picks specific tower to place, then clicks on a tile within a short distance of their base.
- C. Game enables player to place the tower.

6b.

- A. Attempts to place defensive towers in the incorrect spot, placing towers, severity 2
- B. Player clicks on "select your towers" and picks specific tower to place, then clicks on a tile too far away from the player's base.
- C. Game will not allow player to place tower, a message pops up and no tower is placed.

6c.

- A. Attempts to place defensive towers with insufficient funds, placing towers, severity 2
- B. Player clicks on "select your towers" and picks specific tower to place, but does not have enough funds
- C. Game will not allow player to place tower, a message pops up and no tower is placed.

7a.

- A. Causing damage to opponent's tower, attacking opponent's tower, severity 2
- B. Player clicks on one of their weapons pointing toward the opponent's tower
- C. Game animates the weapon being used against the opponent's tower

7b.

- A. Causing damage to opponent's tower (opponent almost out of health), attacking opponent's tower, severity 2
- B. Player uses weapons to damage opponent's castle, the damage puts the castle's health to 0.
- C. The castle's health goes down to 0 the castle is destroyed.

8.

- A. Earning more in-game currency, increasing game currency, severity 2
- B. Player clicks on a weapon to destroy opponent's minions or tower and earns more money
- C. Game changes (increases) numerical value of currency depicted onscreen

9a.

- A. Zoom in and out, in-game navigation, severity 2
- B. During the game, use the scroller to zoom in or out
- C. The map will either zoom in or out depending on the user's input

9b.

- A. Zoom in too far, in-game navigation, severity 2
- B. During the game, the user keeps scrolling past the closest allowed height
- C. The map will not continue to zoom in

- 9c.
  - A. Zoom out too far, in-game navigation, severity 2
  - B. During the game, use the scrolls out past the highest allowed height
  - C. The map will not continue to zoom out
- 10a.
  - A. Scroll around the map, in-game navigation, severity 2
  - B. During the game, click and drag to move around the map
  - C. The map will move up, down, left, or right
- 10b.
  - A. Attempt to scroll beyond the map, in-game navigation, severity 2
  - B. During the game, click and drag to move beyond the edge of the map in some direction
  - C. The map will not move beyond the map border, player can move around the map in other directions
- 11a.
  - A. Advance through levels in the game, game mechanics, severity 2
  - B. Player defeats one level
  - C. Game stores which level player completed, when user clicks "resume game" from the main menu, the next level will load. Note: Main menu should display which level user is currently on.
- 11b.
  - A. Advance through levels in the games (max level reached), game mechanics, severity 2
  - B. Player wins defeats one level, but player is already on last level
  - C. Game ends, Main menu will be displayed and a message of congratulations pops up and a button gives the player the option to start level 1
- 12.
  - A. Character selection, game mechanics, severity 3
  - B. On the main menu, the play clicks "Select Character", Player clicks on the character he/she would like to choose
  - C. Character selection menu with different characters pops up, The selected character is set as the player's character and is displayed when the game starts
- 13a.
  - A. Minions upgrade correctly, upgrades, severity 3
  - B. During the game, the player clicks "upgrade minions", player clicks on minion he/she would like to upgrade
  - C. List of minions pops up, after player selects the minions they want to upgrade. Minions on the board are upgraded and the next time player spawns the selected minion the upgraded minions will be spawned. Appearance of upgraded minion will be different.
- 13b.

- A. Minions upgrade incorrectly (minion max level), upgrades, severity 3
- B. During the game, the player clicks “upgrade minions”, player clicks on minion he/she would like to upgrade, but the minion is already the maximum level
- C. List of minions pops up, after player selects the minions they want to upgrade, message pops up and the minion is not upgraded.

13c.

- A. Minions upgrades incorrectly(insufficient funds), upgrades, severity 3
- B. During the game, the player clicks “upgrade minions”, player clicks on minion he/she would like to upgrade, but the player has insufficient funds for the upgrade
- C. List of minions pops up, after player selects the minions the want to upgrade, message pops up and the minion is not upgraded.

14a.

- A. Weapons upgrade, upgrades, severity 3
- B. During the game, the player clicks “upgrade weapon”, player clicks on weapon he/she would like to upgrade
- C. Weapon is upgraded, and when the character selects weapons the upgraded weapon would be available

14b.

- A. Weapons upgrade incorrectly (max level), upgrades, severity 3
- B. During the game, the player clicks “upgrade weapons”, player clicks on weapon he/she would like to upgrade, but the minion is already the maximum level
- C. List of weapons pops up, after player selects the weapon they want to upgrade. Message pops up and the weapon is not upgraded.

14c.

- A. Weapons upgrade incorrectly (insufficient funds), upgrades, severity 3
- B. During the game, the player clicks “upgrade weapons”, player clicks on weapon he/she would like to upgrade, but the player has insufficient funds
- C. List of weapons pops up, after player selects the weapon they want to upgrade. Message pops up and the weapon is not upgraded.

15a.

- A. Castle upgrade, upgrades, severity 3
- B. During the game, the player clicks “upgrade castle”, player picks between defense/offense, and selects the upgrade from the list.
- C. List of upgrades pops up, castle is upgraded depending on which upgrade was selected

15b.

- A. Castle upgrade incorrectly (max level), upgrades, severity 3
- B. During the game, the player clicks “upgrade castle”, but the castle is already the maximum level

- C. List of upgrades pops up, after the player selects the upgrade he/she wants message pops up and castle is not upgraded.

15c.

- A. Castle upgrade incorrectly (insufficient funds), upgrades, severity 3
- B. During the game, the player clicks “upgrade castle”, but the player has insufficient funds for the upgrade.
- C. List of upgrades pops up, after the player selects the upgrade he/she wants message pops up and castle is not upgraded.

16a.

- A. First time attack, attack warning, severity 3
- B. User sees the warning sign and hear the warning sound.
- C. A warning sign and sound appears on the attacking place for the first time only.

16b.

- A. Other time attack, attack warning, severity 3
- B. User only sees damage but no warning sign and sound.
- C. Game should continue to run smoothly.

17a.

- A. Wrong Game time, UI display, severity 2
- B. User sees the wrong time limit of a game.
- C. A clock counts down by second when a game starts and the game is terminated when the time limit is reached.

17b.

- A. Wrong game clock counting, UI display, severity 2
- B. User sees the time limit of a game, but wrong counting unit.
- C. A clock counts down by random after a game starts and the game is terminated when the time limit is reached.

17c.

- A. Wrong game time and wrong clock counting, UI display, severity 2
- B. User sees the wrong time limit and wrong counting unit.
- C. A clock counts down by random after a game starts and the game is terminated when the time limit is reached.

18.

- A. Display a “start” sign before game starts, UI display, severity 3
- B. After map is selected, user/player click “start” game on main menu
- C. The game level is loaded and then freezed for a sec when the “START!” sign pops up. And then game starts.

19.

- A. Life bar/Assets/Experience level, UI display, severity 3
- B. During the game, player sees their life bar, assets, experience level on the screen
- C. The life bar will decrease when player's castle is hit, assets will be added on as they are gained, and experience level will increase when the player kills enemy minions.

20.

- A. Social account connection, signup option, severity 3 (if time allows)
- B. Users choose to signup with Facebook or other social account when they first play the game.
- C. If successful, the user can start playing right away, if not, the user has to re-enter the account information.

21a.

- A. Rewards, in-game UI function, severity 2
- B. Users get rewards in the end of each game based on their performance.
- C. The user status and assets will get update correctly after receiving the rewards.

21b.

- A. Wrong rewards, in-game UI function, severity 2
- B. Users get very little amount of rewards in the end of each game even if they play well.
- C. The user status and assets will get update correctly after receiving the rewards.

21c.

- A. Wrong rewards, in-game UI function, severity 2
- B. Users get large amount of rewards in the end of each game even if they play badly.
- C. The user status and assets will get update correctly after receiving the rewards.

21d.

- A. Wrong rewards, in-game UI function, severity 2
- B. Users get no rewards in the end of each game no matter how good they are.
- C. The user status and assets will remain the same.

21e.

- A. Wrong rewards update, in-game UI function, severity 2
- B. Users get right amount of rewards in the end of each game based on their performance.
- C. The user status and assets won't get update at all.

21f.

- A. Wrong rewards update, in-game UI function, severity 2
- B. Users get right amount of rewards in the end of each game based on their performance.
- C. The user status and assets won't get update correctly, e.g. decreases very large.

21g.

- A. Wrong rewards update, in-game UI function, severity 2
- B. Users get right amount of rewards in the end of each game based on their performance.
- C. The user status and assets won't get update correctly, e.g. increases very large.

21h.

- A. Wrong rewards update, in-game UI function, severity 2
- B. Users get right amount of rewards in the end of each game based on their performance.
- C. The user status and assets won't get update correctly, e.g. decreases very little.

21i.

- A. Wrong rewards update, in-game UI function, severity 2
- B. Users get right amount of rewards in the end of each game based on their performance.
- C. The user status and assets won't get update correctly, e.g. increases very little.

22a.

- A. Throw food bombs, placing defense, severity 3
- B. User/player clicks and drags the bomb icon on defense UI panel
- C. A bomb is attached to the cursor and ready to explode and do damages to enemy's minions when releases. Currency is spent correctly.

22b.

- A. Throw food bombs incorrectly(insufficient funds), placing defense, severity 3
- B. User/player clicks and drags the bomb icon on defense UI panel
- C. If player does not have enough currency for buying the bombs he/she selects, warning sound will pop up and bomb purchasing will fail.

22c.

- A. Throw food bombs incorrectly(incorrect placement), placing defense, severity 3
- B. User/player clicks and drags bomb off the map
- C. Warning sound will pop up and the bomb will not be placed.

23.

- A. Select map/themes, changing background, severity 3
- B. User/player clicks "start game" on main menu; choose every possible maps
- C. "Select your maps" panel should pop out. Every map is able to be loaded into game each single time.

24.

- A. Player rapidly clicks a button too many times, unexpected interactions, severity 2
- B. Player clicks a given button rapidly many times
- C. The game should not crash, and should only do the corresponding action once



25.

- A. Attempted click and drag on button, unexpected interactions, severity 2
- B. Player attempts to click and drag a button in the game
- C. The button does not move, and the click should not register