QA Testing Log

JAN 12 – 21 SPRINT 1

* Testing website functionality:
  + Website on following platforms:
    - Windows
      * Chrome – Fully functional
      * Firefox – Fully functional
      * Microsoft Edge – Fully functional
    - Mac
      * Safari – Fully functional
      * Chrome – Fully functional
      * Firefox – Fully functional
    - Android
      * Chrome – Top navbar does not show up properly otherwise functional
      * Samsung Internet app – Top navbar does not show up properly otherwise functional
    - IOS
      * Chrome – Top navbar does not show up properly otherwise functional
      * Safari – Top navbar does not show up properly otherwise functional
* Testing user account creation:
  + Desktop Web Browsers
    - User account creations are successful
    - User log in is successful
  + Mobile Web Browsers
    - User account creations are successful
    - User log in is successful

JAN 22 – February 3 SPRINT 2

* Testing website functionality:
  + Website on following platforms:
    - Windows
      * Chrome – Fully functional
      * Firefox – Fully functional
      * Microsoft Edge – Fully functional
    - Mac
      * Safari – Fully functional
      * Chrome – Fully functional
      * Firefox – Fully functional
    - Android
      * Chrome – Top navbar does not show up properly otherwise functional
      * Firefox - Top navbar does not show up properly otherwise functional
    - IOS
      * Chrome – Top navbar does not show up properly otherwise functional
      * Safari – Top navbar does not show up properly otherwise functional
* Testing account creation:
  + Windows:
    - Edge: When submitting information to create an account, an error shows “Please enter a valid.”. This message needs to be changed to be more detailed and not show if all fields are submitted/added to database.
    - Chrome: Same behavior as Edge above
    - Firefox: Same behavior as Edge/Chrome above
  + Mac:
    - Safari: Same behavior as browsers on Windows
    - Chrome: same behavior as Chrome on Windows
    - Firefox: same behavior as Firefox on Windows
  + iOS:
    - Safari: Unable to test due to missing navbar (see “website functionality”)
    - Chrome: Unable to test due to missing navbar (see “website functionality”)
* Testing email verification:
  + Received email indicating “Visit the following link to activate your account” but no link is shown. Tested email sent to iCloud and gmail email addresses.
* Design issues:
  + Windows:
    - Edge: Perhaps make “login” or “register” on homepage hyperlinks to their corresponding webpages
    - Firefox: Perhaps make “login” or “register” on homepage hyperlinks to their corresponding webpages
    - Chrome: Perhaps make “login” or “register” on homepage hyperlinks to their corresponding webpages
  + Mac:
    - Safari: same as browsers above
    - Firefox: same as browsers above
    - Chrome: same as browsers above
  + iOS:
    - Safari: same as browsers above
    - Chrome: same as browsers above
  + Android:
    - Firefox: same as browsers above
    - Chrome: same as browsers above

FEB 4 – FEB 17 SPRINT 3

* WEBSITE FUNCTIONALITY
  + Mobile testing
    - IOS and Android are still having issues with navigation of website. (SR)
    - Top navbar does not show up properly on iOS Safari or iOS Chrome (DH)
    - Unity demo functional across all browsers. (SR)
  + User Account Creation
    - Needs confirm password for extra security when creating accounts. (SR)
    - Email verification with link and security code fully functional on desktop web browsers. Tested on chrome, firefox, safari and edge. (SR)
    - Need verification to confirm login status on the top of the page. (SR)
    - Currently there is no way to verify if a user is currently logged in to their account on the website. (SR)
    - Need to redirect users to the main playable game page when logged in successfully. (SR)
    - Successful account creation message now appears properly (DH)
    - Receiving verification email to an iCloud email account sends a invalid link. Testing with Gmail email address works properly. (DH)
  + Website Design Issues:
    - Clicking “login” or “register” should be hyperlinked to their corresponding webpages. (DH)
* Game functionality
  + Old build still functioning properly on the demo page of the website. (SR)
    - Current issues include collision on objects are not working properly but collision is working properly within the editor. (SR)
  + Take a break reminder pops up as intended but does not disappear currently and sits at the top of the game. (SR)(DH)
  + Building towers and placing them on the map is functioning as intended. (SR)
  + Scoring still needs to be implemented and tested. (SR)
  + Clicking “new game” starts a scene and a sound plays. This is working as intended. (DH)
  + Settings gear icon presents landing screen. This is functional. (DH)
  + Resume button restarts game, should resume the current world. (DH)
  + Quit button on the landing screen is not functional. (DH)
  + Settings button is not functional. (DH)
* UI functionality
  + Need to build a health bar that is easily seen by players indicating health of home base structure. (SR)
  + Resource management bar is implemented, needs to be tested further based on progression through the game. (SR)
  + Gear icon implemented in the UI which brings up the paused menu, working as intended. (SR)
  + Considering adding enemy health bars to help with identifying how much damage is being done by the player. (SR)
* Database testing
  + ORM layer code installed. (SR)
  + Firebase installed to pull data from unity to populate the leaderboard database. (SR)

FEB 18 – MAR 2 Sprint 4 (Blue text - Doug Hartley Red text - Stevan Rajkovic)

● WEBSITE FUNCTIONALITY

○ Mobile testing

■ IOS and Android now have a functional website with appropriate navbar. Issue from Sprint 3 is resolved.

■ Unity demo functional across all browsers.

* New log in location on upper right corner of webpages function properly
* New button on top right corner of the page successfully redirects user to their own user profile pages

○ User Account Creation

■ Confirm password is only available after the account has been made. It needs to be part of the registration process.

■ Email verification with link and security code still fully functional on desktop web browsers. Tested on chrome, firefox, safari and edge and mobile Safari.

■ Email verification works properly on Gmail accounts.

■ We still need to show that the user is logged in with an option to log out.

■ We still need to redirect users to the main playable game page when logged in successfully.

■ Successful account creation message still appears properly.

■ Receiving verification email to an iCloud email account sends a invalid link. Testing with Gmail email address works properly. This is because on emails other than Gmail, there is no period before .org, resulting in an invalid link.

* New log in location on upper right corner of webpages function properly
* New button on top right corner of the page successfully redirects user to their own user profile pages

○ Website Design Issues:

■ Clicking “login” or “register” should be hyperlinked to their corresponding webpages. This needs to be done before project completion.

* Log out option needs to be more visible for users and not buried in the user account page.
* Leaderboard needs to be connected and updated properly with new scores.
* Need to give users a way to change email addresses linked to the account.
* Changing email addresses in the user profile page needs to send out a new email verification code.

● Game functionality

○ Updated build still functioning properly on the demo page of the website.

■ Object collision works in editor.

○ Scoring still needs to be implemented and tested.

* New game new world generation is functional, new maps, asset locations and collisions are all working as intended.
* Tower projectile animation and function are working as intended, sound still needs to be decided on.
* Enemy health showing as intended.
* Tower and main structure health needs to be more visually noticeable by the player.
* Enemy animations are working as intended.
* Tower tracking animations working as intended.
* Possibly need to have visual indicator of tower placements and effective tower range so that the players have a better understanding of how the towers effective ranges.
* Need to finalize and implement wave functionality.
* Mobile controls are still working as intended.

● UI/UX functionality

○ Gear icon implemented in the UI which brings up the paused menu, working as intended.

* Resource management bar is being updated as intended using intended resources on every newly generated map.

○ Clicking “new game” starts a scene and a sound plays. This is working as intended.

○ Settings gear icon presents landing screen. This is functional.

○ Resume works properly.

○ Quit button on the landing screen is not functional.

○ Settings button is not functional.

MAR 3 – MAR 15 Sprint 4 (Blue text - Doug Hartley Red text - Stevan Rajkovic)

● WEBSITE FUNCTIONALITY

○ Mobile testing

■ As of 3/15, IOS and Android now have a functional website with appropriate navbar.

■ Unity demo functional across all browsers.

* As of 3/15, login/logout work properly.
* As of 3/15, New button on top right corner of the page successfully redirects user to their own user profile pages

○ User Account Creation

■ As of 3/15, users are now able to confirm their password before officially creating the account. Issue from sprint 4 is resolved.

■ Email verification with link and security code still fully functional on desktop web browsers. Tested on chrome, firefox, safari and edge and mobile Safari.

■ Email verification works properly on Gmail accounts.

■ There is now an option to show that the user is logged in. However, it would be nice to click the username on the top right-hand corner which presents a drop-down menu showing to logout.

■ As of 3/15, logging in redirects users to the game. This is resolved from sprint 4.

■ Successful account creation message still appears properly.

■ As of 3/15, receiving verification email to an iCloud email account sends a invalid link. Testing with Gmail email address works properly. This is because on emails other than Gmail, there is no period before .org, resulting in an invalid link.

○ Website Design Issues:

■ Clicking “login” or “register” should be hyperlinked to their corresponding webpages. This needs to be done before project completion.

* Log out option needs to be more visible for users and not buried in the user account page.
* Leaderboard needs to be connected and updated properly with new scores.
* Need to give users a way to change email addresses linked to the account.
* Changing email addresses in the user profile page needs to send out a new email verification code.
* Leaderboard Functionality (NEW)
  + New implementation of personalized scores are on all user profile pages now.
  + Leaderboard is pulling and posting scores properly.
  + Terminology of the leaderboard page needs to be tweaked.
  + Need to consider hiding real names of the players and only use the alias, or consider it an “opt in” feature.

● Game functionality

○ Updated build still functioning properly on the demo page of the website.

■ Object collision works in editor.

* “Start wave” button works as intended.
* Music works as intended.
* Need a pause/landing screen button with the new UI.
* New landing screen UI works as intended when option to “maximize on play” is selected. If it isn’t, the settings and quit buttons do not work.
* Quit button does not work, regardless if “maximize on play” is selected or not.
* Volume changing UI works as intended.
* Scene changing UI works as intended.

○ Scoring still needs to be implemented and tested.

* New game and new world generation is functional, new maps, asset locations and collisions are all working as intended.
* Tower projectile animation and function are working as intended, sound still needs to be decided on.
* Tower upgrade system needs to be implemented.
* Enemy health showing as intended.
* Tower and main structure health now more visible and easier to discern.
* Enemy animations are working as intended.
* Tower tracking animations working as intended.
* Visual indicators for towers and attack ranges still need to be finalized.
* Wave functionality is up and running as intended.
* Game over function and score posting works as intended.
* Mobile controls are still working as intended.

● UI/UX functionality

○ Gear icon implemented in the UI which brings up the paused menu, working as intended.

* Resource management bar is being updated as intended using intended resources on every newly generated map.
* New UI graphics have been implemented across the board and is working as intended.

○ Clicking “new game” starts a scene and a sound plays. This is working as intended.