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# Requirements for Mobile App Xamarin Forms Cross Platform Game.

Requirements

1 - 4 and 7 are the same for both Platforms.

1. Game GUI set-up correctly.
   1. Player Ship in the top right of the screen.
   2. Background Space Image Showing and covering Game screen.
   3. Score showing on top of screen and updating.
2. Game Objects
   1. Game Objects are appearing consistently (Every 3 seconds).
   2. Distribution around the player (Does not have to be even or symmetrical, just randomly either side.)
   3. Game Objects Moving consistently (Every 3 seconds, random movement)
   4. A Random Game Object will track the player each movement turn.
3. Collision
   1. Game Object collision will send Player to score board page
   2. Multiple Game objects have the same effect (Multiple testing).
4. Score Board
   1. After collision Score board Page is pushed to the page Navigation stack (Visible to User).
   2. Correct Score has been passed to the Page (Score that was being displayed for user at time of collision.)
   3. Only five scores are displayed.
   4. Scores are sorted from Highest (Top) to Lowest (Bottom).
5. File Reading
   1. Default score should be read initially from the embedded file resource (all 255, with user score added after first time playing If greater than 255).
   2. After this it should read from local storage file with the user Scores (If greater than 255).
6. Movement.
   1. Android (Accelerometer Reading)
      1. Tilt Extreme Up -- Player moves UP only.
      2. Tilt Extreme Left – Player moves LEFT only.
      3. Tilt Extreme Right – Player moves RIGHT only.
      4. Tilt Extreme Down – Player moves DOWN only.
      5. Tilt Down Left – Player moves DOWN LEFT only.
      6. Tilt Down Right – Player moves DOWN RIGHT only.
      7. Tilt Up Right – Player moves UP RIGHT only.
      8. Tilt Up Left – Player moves UP LEFT only.
      9. If player Moves off screen – Re-appear on screen on opposite side.
   2. UWP (Button Press – buttons are invisible on the UI)
      1. Top Middle button press -- Player moves UP only.
      2. Left Button press – Player moves LEFT only.
      3. Right Button press – Player moves RIGHT only.
      4. Down Button press – Player moves DOWN only.
      5. Down Left button press – Player moves DOWN LEFT only.
      6. Down Right button press – Player moves DOWN RIGHT only.
      7. Up Right button press – Player moves UP RIGHT only.
      8. Up Left button press – Player moves UP LEFT only.

7.0 Consistency

7.1 Android – can multiple deployments over time reveal inconsistencies.

7.7.1 – Test on multiple Android Devices.

7.2 UWP– can multiple deployments over time reveal inconsistencies.