Legendary
Game of Heroes
Selfie App

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Project Description

Goal:

Create a stand-alone photo application for use with the pre-existing mobile app “Legendary: Game of Heroes”.

Functionality:

A user will open the app, select an image of a character from their Legendary account and insert it into the selfie using augmented reality, and capture the augmented image to their phone library. They can then edit the photo with text and graphic inserts. Once they are satified, they can save and/or share it.

Technologies Used

- Developed in the game development platform, Unity.
- Coded in C# using Visual Studio.
- Uses the AR Camera capabilities of Vuforia.
- Project builds to Android device using Android Studio

Scrum Process

Week 1-2: Get Unity and appropriate packages installed; get acclimated with C#; organize project structure on GitHub, create first sprint and assign tasks; paper prototype and meet with company representative.

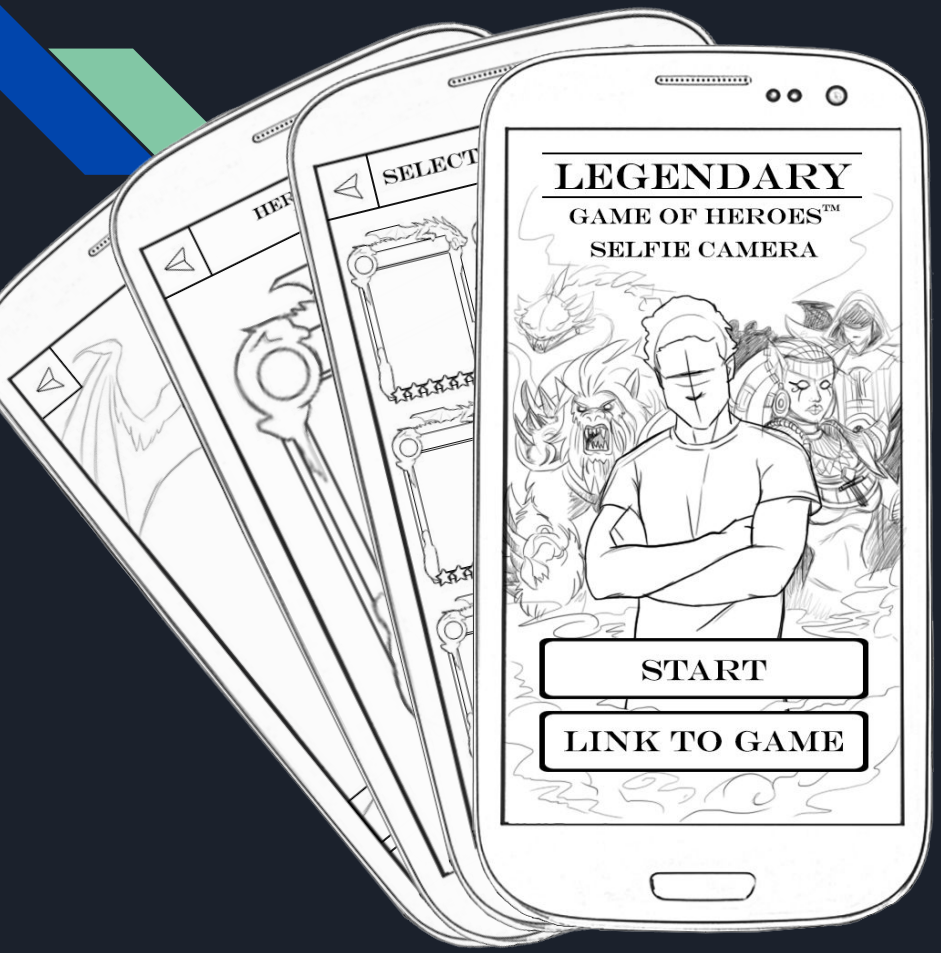
Week 3-4: Sprint 1 - Capture image from camera feed and save to the device library.

Week 5-6: Sprint 2 - Get augmented reality object to show on camera feed.

Week 7+: Future Sprint(s) - Implement user-defined tracking and possibly facial detection. Include animated assets from N3TWORK in augmented image (Authorization still pending).

Challenges and Difficulties

- Build errors, requiring old versions of Java and Android SDK tools
- Debug.Log() shows errors in Unity, but not on the Android device. The ‘ToString()’ method used for debugging on the Android device does not show when the project is run in Unity.
- Unity and Vuforia each have their own API, some of the data types do not transfer between them well.
- Unity changes a lot of files just from opening the project. Keeping things in sync with GitHub has been frustrating.
- Unity’s WebCamTexture is not the same as Vuforia’s ARCamera.



Prototype Draft

Sketches and User Stories were drawn up before development.

- Sketches for each screen necessary for the application.
- Notes on button and screen functionality included with the blueprint sketches.
- Use Cases developed alongside the sketches (ex. If the user backs out of the editing screen before saving).

Current Prototype

Current Functionality:

- User can transition back and forth between screens
- Front-facing camera on the device displays feed
- Camera feed is augmented if the predetermined tracking image is detected

Things to Fix:

- Need to capture snapshot of augmented camera feed
- Save snapshot to device regardless of local gallery file path