A R C

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Intro

The goal of ARC was to combat and eventually solve the growing problem of social isolation in our communities and in team environments. Our product, a diverse Augmented Reality Collective activity center application, was designed for fostering a spirit of collaboration within its user base by forcing players to work together to accomplish tasks specifically crafted so that they could not be completed alone.

We believed that by creating games or events that were new and fun, we'd be able to keep engagement over time and encourage social growth and cooperation, that could then eventually grow beyond just the aspect of accomplishing tasks within the app.

We were able to successfully implement the "scavenger hunt/clue solving within the landscape of augmented reality" aspect of what we had planned for ARC's development.

Requirements for Developing/Running ARC

- This project required the use of the the programming language Swift within Xcode, as well as its built-in object library and AR kit.
- We also needed a device with a macOS, and an iPhone to test on.

Project Stretch Goals

- We had many ideas for aspects of ARC that were well beyond simple scavenger hunt functions; the most compelling of these was a full-scale PvP Battle Royale competition system, but we also had plans for games like Capture the Flag, or even AR-based relay race events. The most ambitious of our designs was to ultimately transform the app into a full-blown Augmented Reality RPG, where players would complete quests positioned at specific real-world locations, gain experience as part of a leveling system, earn rewards, and buy/sell/trade equipment.

Demo

Post-Mortem

What Went Right:

- We successfully implemented the most necessary key features, such as:
  - AR support
  - Object generation within the augmented reality
  - Creation of an inventory where a record of collected objects could be saved.
  - Control over when objects appear visible to players, based on actual distance to those objects

What Went Not As Right:

- Despite some lofty goals, we just didn't have the hours or the manpower of an entire team to accomplish many of the additional tasks we had planned.
- We were not able to implement network features which would allow players to connect to each other and accomplish tasks together. For now, players would both have to load the app onto their phone manually and then collaborate together in person to solve clues and find objects.
- In order to grow ARC from this point, we would need to enlist a full team of developers, as well as designers, animators, and other creatives to address each facet of our ideas that needs improvement.