MICHIGAN STATE
UNIVERSITY

# Project Plan
## Mobile Mini Movers Who Care

### The Capstone Experience

Team TWO MEN AND A TRUCK

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*From Students…*
*…to Professionals*

# Functional Specifications

- Entertain children on a long move

- Collect points while keeping boxes on a truck

- Compete with friends via leaderboard (Facebook)
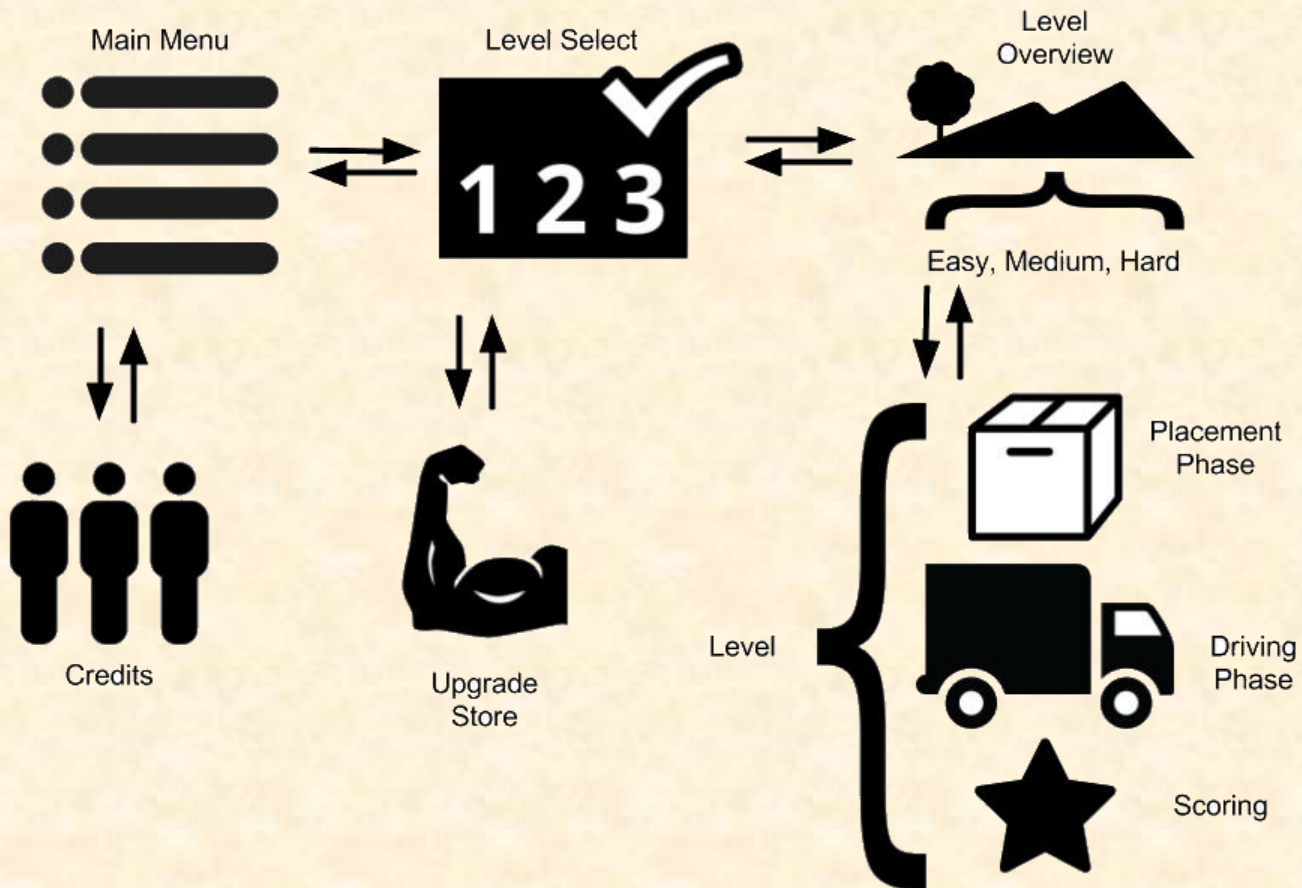
# Design Specifications

- Choose levels or go to the store through the menu

- Levels consist of three difficulties
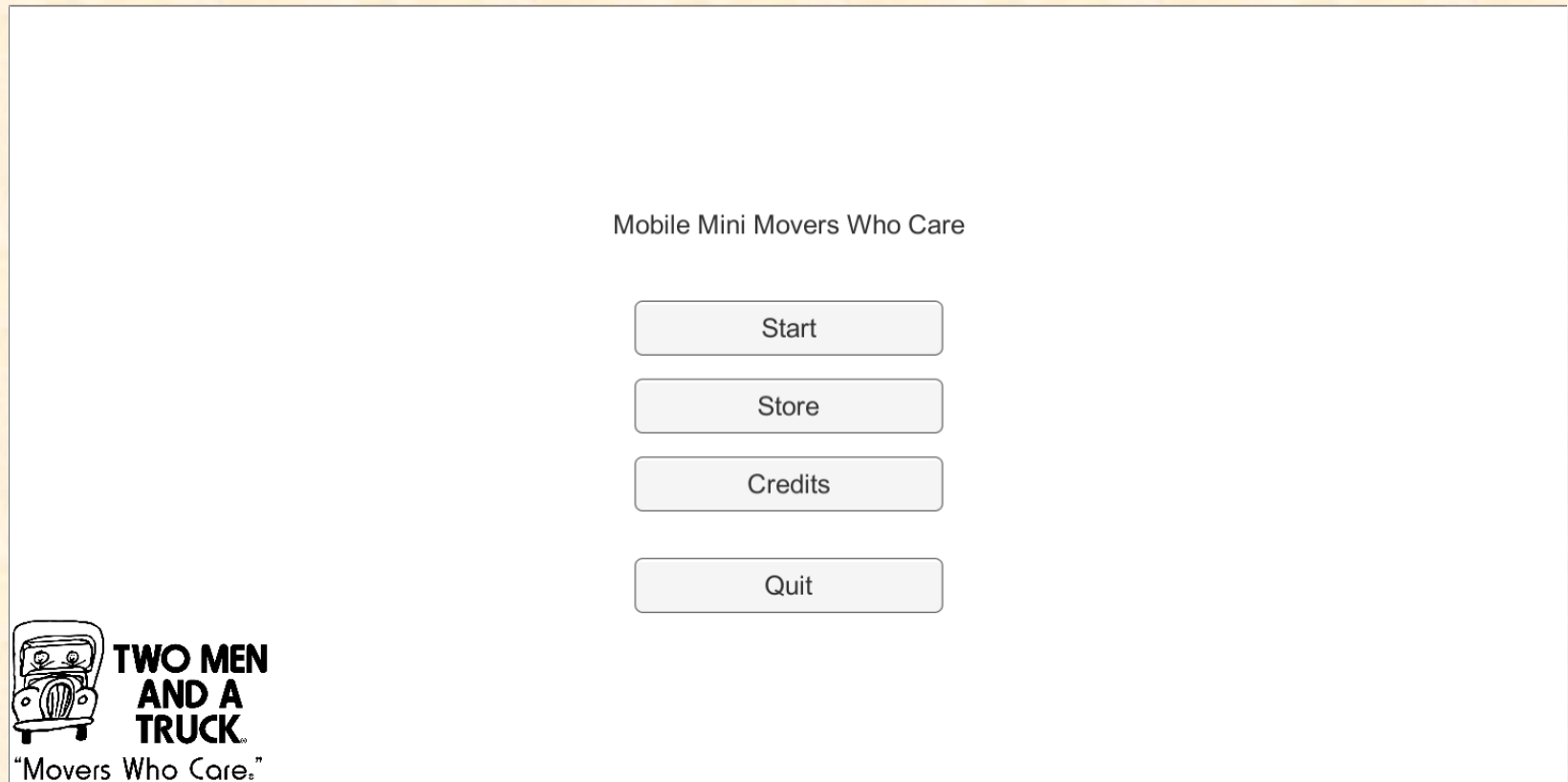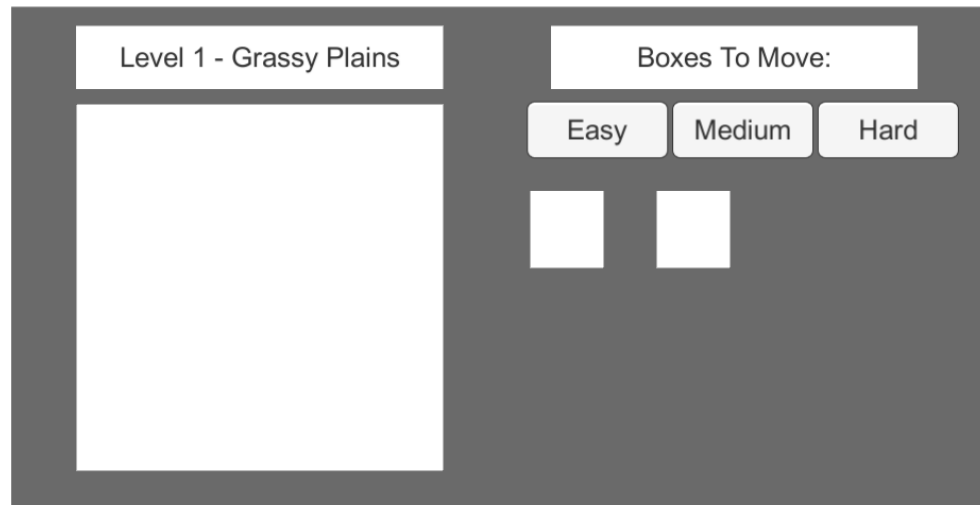
- The store contains upgrades for trucks

# Game Flow



Game Flow:

Main Menu · Level Select · Level Overview · Easy, Medium, Hard · Credits · Upgrade Store · Level · Placement Phase · Driving Phase · Scoring
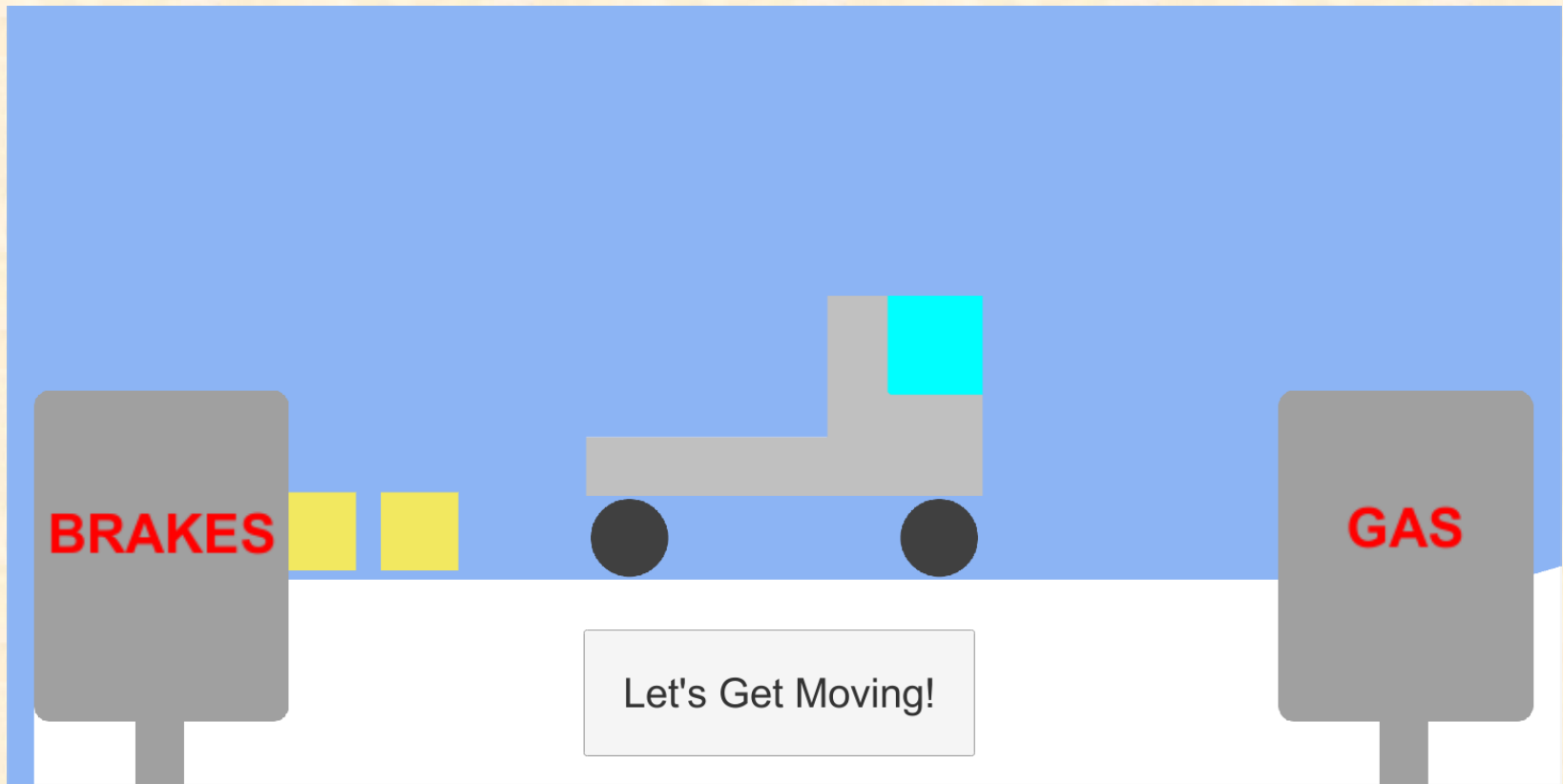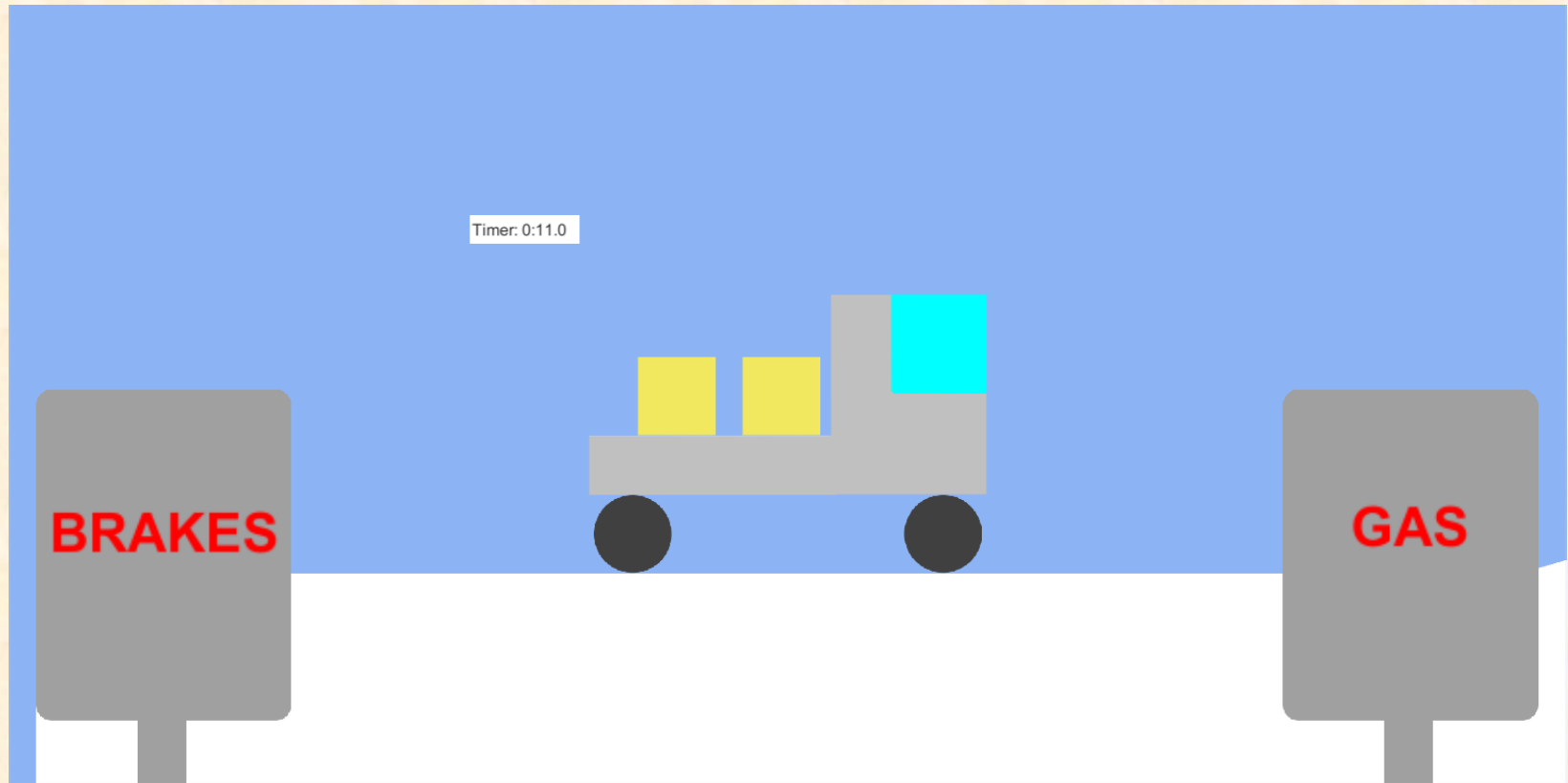
# Screen Mockup: Main Menu Screen

# Screen Mockup: Level Overview

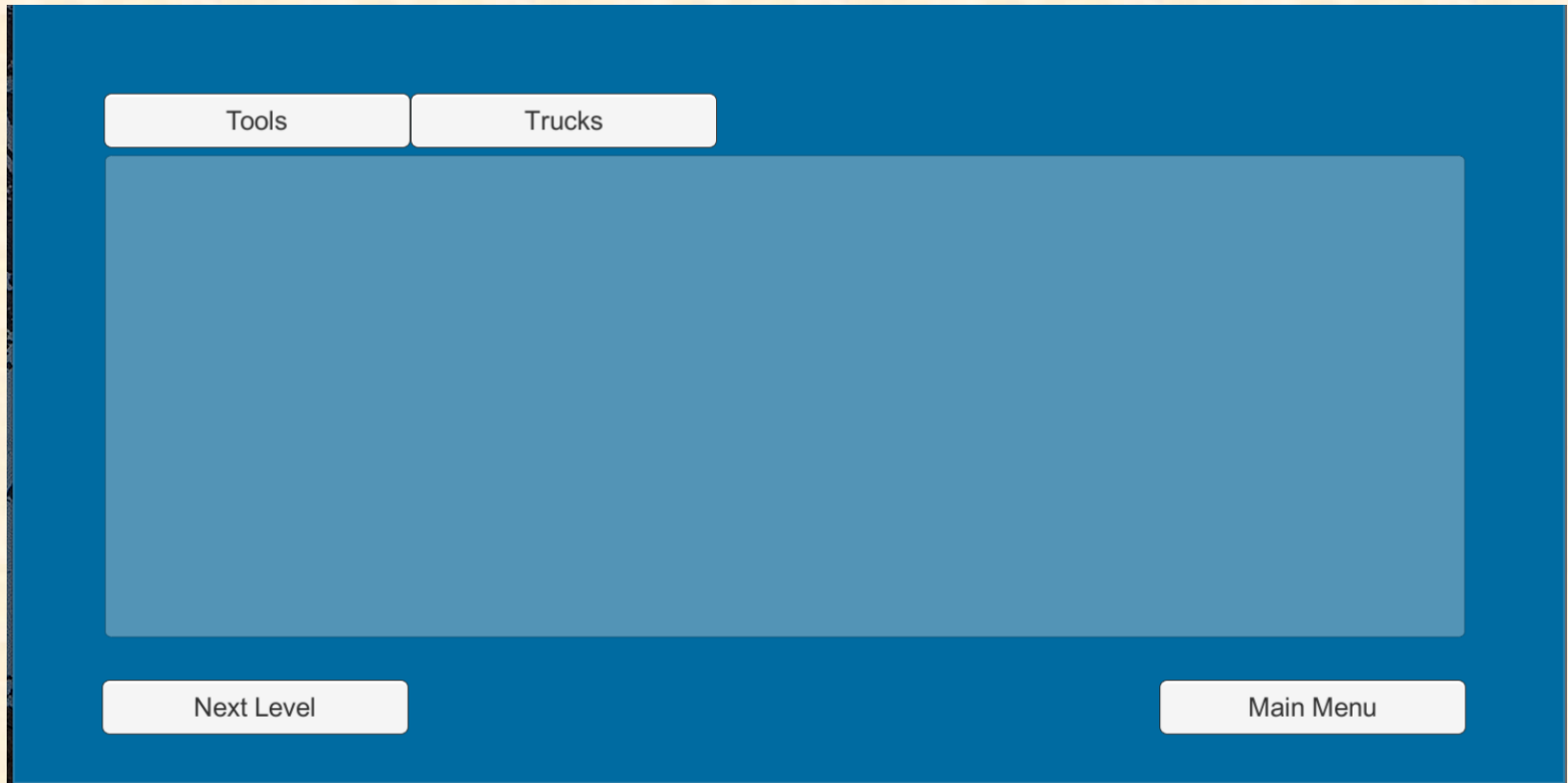# Screen Mockup: Placement Phase

# Screen Mockup: Driving Phase

# Screen Mockup: Results Screen

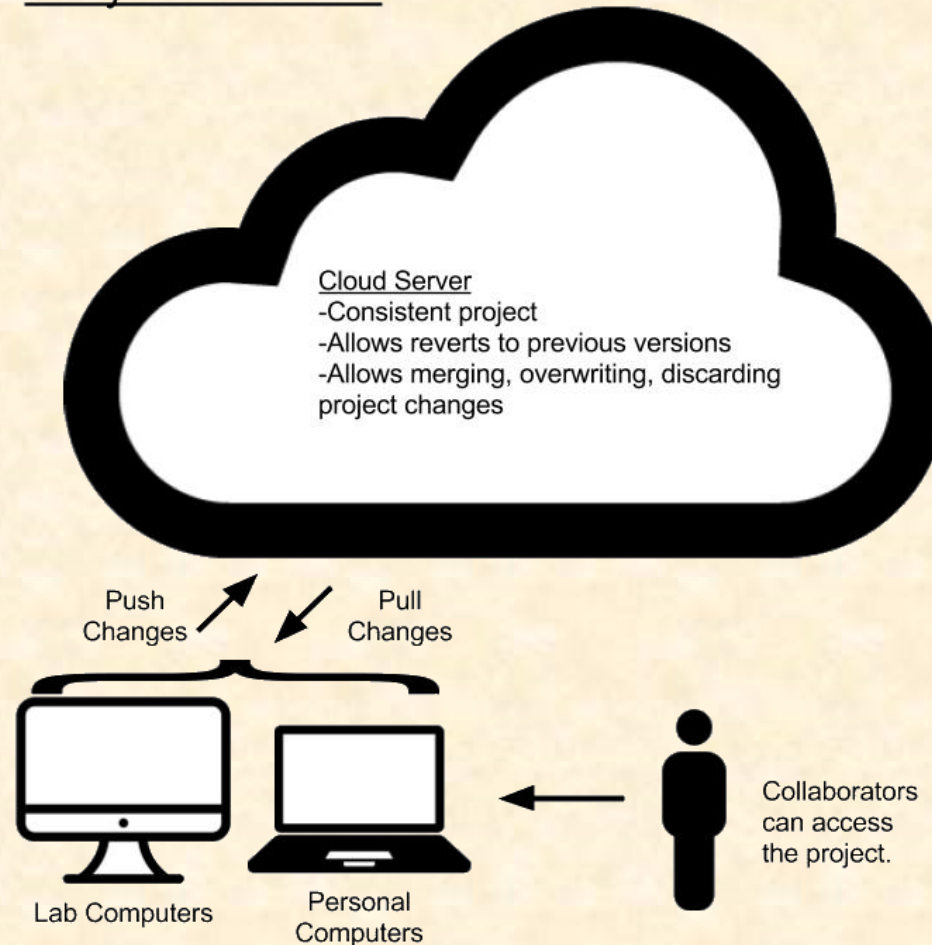# Screen Mockup: Store UI Template

# Technical Specifications

- Game built on Unity
  - Unity C# scripting
  - Facebook API
  - Directly port to Android
  - Port through XCode for iOS
- Unity Collaborate for version control

# System Architecture



Unity Collaborate:

Cloud Server
-Consistent project
-Allows reverts to previous versions
-Allows merging, overwriting, discarding project changes

Push Changes

Pull Changes

Lab Computers

Personal Computers

Collaborators can access the project.

# Deployment Process



Deployment:

Android Build → Test on Multiple Android Devices → Google Play Store

Unity Game Engine C# Scripting → Build Xcode Project → iOS Build → Test on Multiple iOS Devices → App Store

Revise
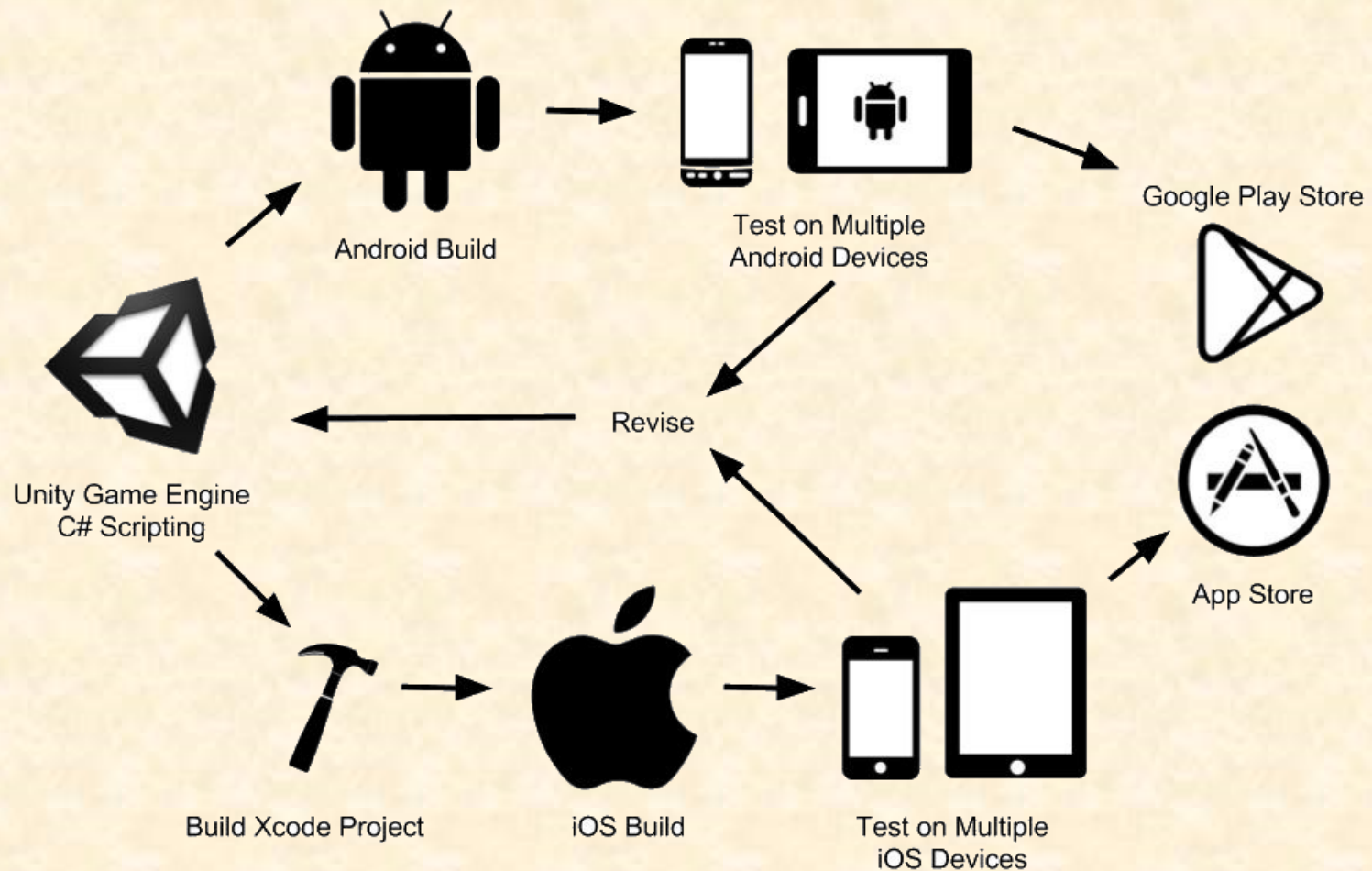
# System Components

- Hardware Platforms
  - Android devices
  - iOS devices
- Software Platforms / Technologies
  - Unity game engine
  - XCode for iOS port

# Testing

- Distribute to target audience
  - Make adjustments as necessary
- Receive feedback from game dev students
- Test on personal Android and iOS devices

# Risks

- Gameplay testing
  - Need to know if the game is enjoyable by target audience
  - Have game tested by target audience (young children)
- Social networking service integration
  - Leaderboards associated with social network sites (stretch goal)
  - Research Unity documentation for linking Unity with social networks
- Assets
  - Need art and audio assets, no members are artists/audio majors
  - Unity asset store, outsourcing, TMT marketing department
- Consistency across different devices
  - Same proportional size for all screens
  - Test on variety of devices

# Questions?