
AR Notebook

Development Plan

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PROJECT OVERVIEW

Plain notebooks are bland and not exciting. This project will focus on creating notebooks with input from your recent activity on your phone. For many people, looking at notes is not gratifying. This application is designed to make the process of reviewing notes more engaging for the user. The notes a person views through our app will become more memorable due to the built-in visuals and the interactions a person can have with those visuals.

PROJECT PURPOSE, SCOPE, OBJECTIVE

The goal of this project is to develop an iOS application intended for personal use that can open saved notebooks on any surface. This is made possible through the integration of 2 and 3 dimensional notebooks with the user's smartphone camera. This process is known as Augmented Reality. Within the notebooks, there will be pages in which a user can add gallery images onto the notebook. The app will allow each user to create new notebooks with the possibility of multiple pages if the user wants. After creating a notebook, the user will be able to select between them and switch pages.

By the time the project is finished, an app will be published to the App Store. Users will be able to create, save, and edit a notebook page. When there are more tools and functions allowed by ARKit, the project will be able to be expanded on.

TEAM ORGANIZATION

We understand that all teammates are responsible for all aspects of the project. However, we have designated the following roles to assist each other:

Team Lead: Megan Majewski

Documentation Lead: Darion Thompson

Front End Lead: Darion Thompson

Back End Lead: Artur Bushi

Presentation Lead: Artur Bushi

QA Lead: Arman (Mohammed) Ali

Hardware Lead: Arman (Mohammed) Ali

Backup: Megan Majewski

Backup: Artur Bushi

Backup: Arman (Mohammed) Ali

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Backup: Darion Thompson

Backup: Darion Thompson

Responsibility Breakdown:

Team Lead: Responsible for the holistic view and organization of the project so that nothing falls through the cracks. Team lead is also responsible for helping manage the repository appropriately.

Documentation Lead: Responsible for giving the final seal of approval for each document created throughout this project's lifecycle. Additionally, this person is responsible for submitting all required documents through Blackboard before the due date.

Presentation Lead: Responsible for the organization of group presentations. Presentation lead must also design the slides/presentation material needed.

QA Lead: Responsible for ensuring that overall quality of the application meets a high standard. Also responsible for reviewing each new feature and functionality so that it does not break previously implemented functions.

PROBLEM RESOLUTION POLICIES

Team disagreements could happen over issues concerning vision, technologies, features, or usage strategies. The following is a guideline of the consequences that come from disagreements and/or submission failures.

Meeting all due dates is mandatory. In the event that a due date cannot be met, the person will be held accountable to inform the group at least 24 hours before the date. If a member fails to inform the team, said member would commit the first offense. The 24 hour window is essential because it creates enough time to re-task and prioritize the missed work.

All members must attend and participate in all meetings. If a member cannot commit to a meeting, they must inform the rest of the group 24 hours prior to that meeting. After the missed meeting, the member must connect with the group separately to catch up on any missed information. If the team is not informed before a member misses a meeting the consequences will be based on the number of offenses listed below. The teacher assistance will be informed in any extraordinary cases.

If there is a disagreement that comes up between two group members, they must attempt to handle it internally first. If there is a difference that cannot be settled, the group will consult the lead for direction. If no person is assigned to this, then it will be dealt with by a team vote. We will strive to keep an open line of correspondence between all teammates and a friendly, pleasant, conscious and proficient workplace.

Our consequences will be as follows :

- 1) First offense, you will be given a written warning from the Team Lead to work on misconducts
- 2) Second offense, you would be taken to the TA for further instruction
- 3) Third offense, you would be dealt with either Dr. Khayyam or Dr. Sam for further instruction to resolve this matter.

PROJECT PLAN OVERVIEW

As a group, we have decided to meet with our TA after class every Monday. After this meeting we will have our group meeting. The purpose of the monday team meeting is to focus on communicating status of the project, and required course documentation rather than development. On Saturdays we will have another team meeting to focus on development. This meeting will usually be a long session where we can focus on development and getting caught up with the rest of the group. For this project, our client is based in California, so we have chosen to meet after class on Wednesdays. Our client does understand that this time will be flexible depending on release of the class. All meeting locations, rules, and times are subject to change.

PROJECT ITERATION PLAN

Iteration 0: Planning/Organization (9/11 - 9/25)	
9/12	Client Kickoff meeting
9/16	iOS Development Training Course(s) including Running iOS App
9/19	Development Plan Finalized
9/22	Each team member has local working environment for development
Iteration 1: Requirements Gathering (9/25 - 10/9)	
9/25	Team meeting to brainstorm possible revised requirements
9/27	Review requirements with Client
10/9	Requirements Document Finalized
Iteration 2: Initial Development (10/9 - 10/23)	
10/18	Internal team demo
10/23	First Prototype
Iteration 3: Design (10/23 - 11/6)	
10/25	Team meeting to brainstorm review design specifications

10/30	Finalize test plan document and review the presentation slide
11/2	Finalize test plan document and review the presentation slide
11/6	Test Plan Finalized
Iteration 4: Final Development (11/6 - 11/20)	
11/6	Internal team demo for second prototype
11/13	Second Prototype
Iteration 5: Final Product(11/20 - 12/6)	
12/4	Final presentation team review
12/6	Final Presentation

CONFIGURATION MANAGEMENT PLAN

For this project, our client does not have a requirement for the repository. As a group, we have decided to use a public repository hosted on GitHub for our source control.

TECHNOLOGIES

For this project we will use the following technologies:

- AR Kit
- Swift 4
- SQLite
- iOS 11.0 +
- SceneKit

We chose these technologies since our client requested this application be built using AR Kit which is made for iOS devices. The rest of the technologies are necessary for developing with this kit.