

SLUGdex

Team Name:

The Slug Surveyors

Team Members:

Kyle Lim - Product Owner

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Fall 2022

The Problem

What

Places to hangout / see beautiful sights / have new experiences
are spread only by word-of-mouth

Why

Share, enjoy and preserve a piece of the folklore of UCSC

Who

Us!- Prospective and Current UCSC Students, Faculty and Family

SLUGDEX

Our Goals

1. Guide users to discover locations around campus ✓
2. Allow users to view information about locations, based on if found ✓
3. Show user progress and leaderboards to incentivize exploration ✓
4. Update and add locations from a database ✓
5. Store user profile and statistics in a database ✓

Our Tech Stack

Flutter (Front-End)

Cross-platform

Simplistic Development

Firebase (Back-End)

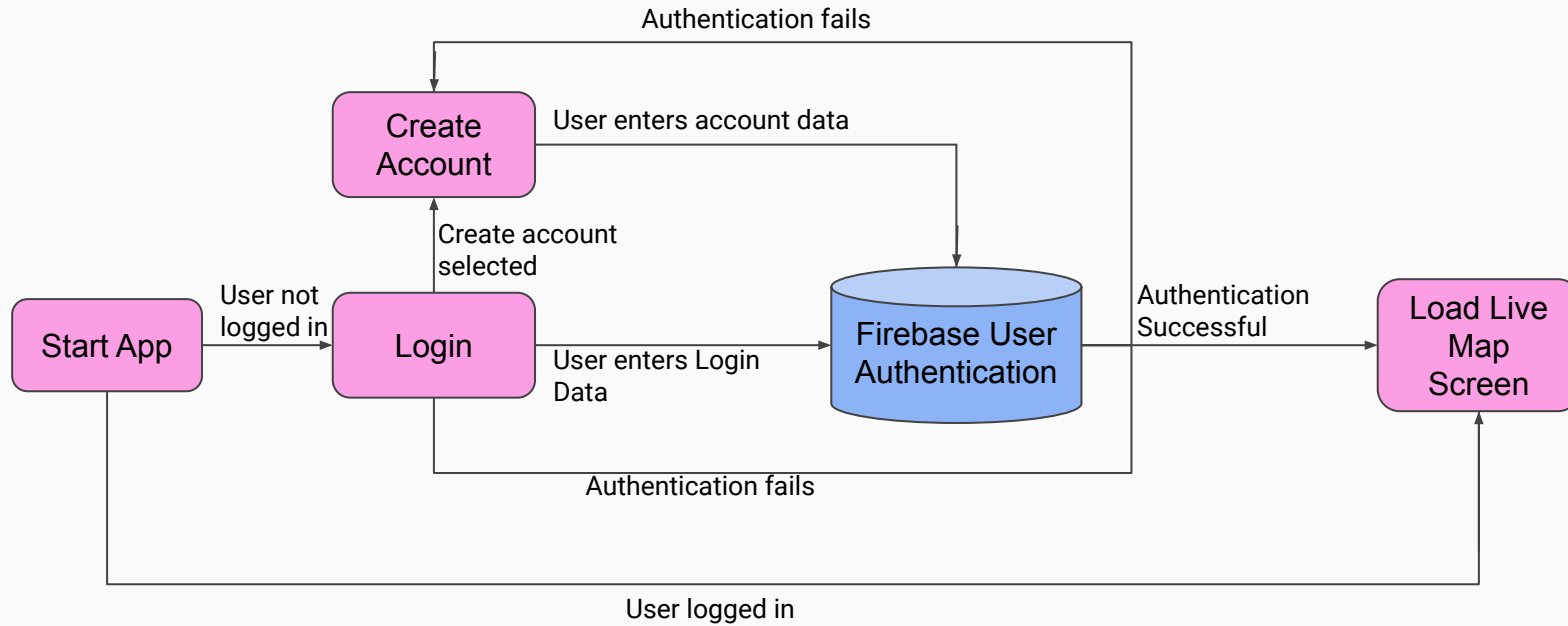
Authentication

Cloud Firestore (User and entry data)

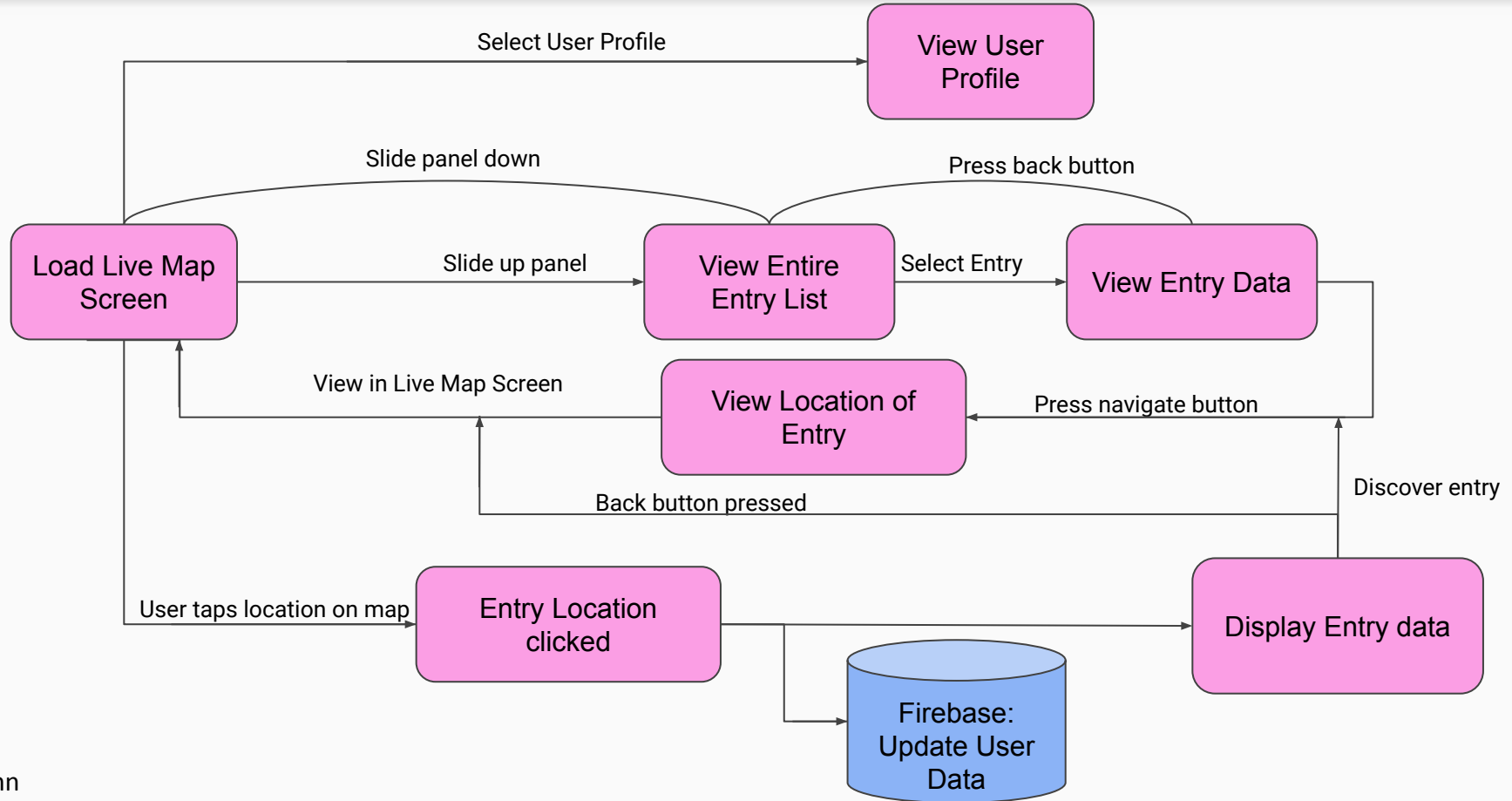
Storage (User images)



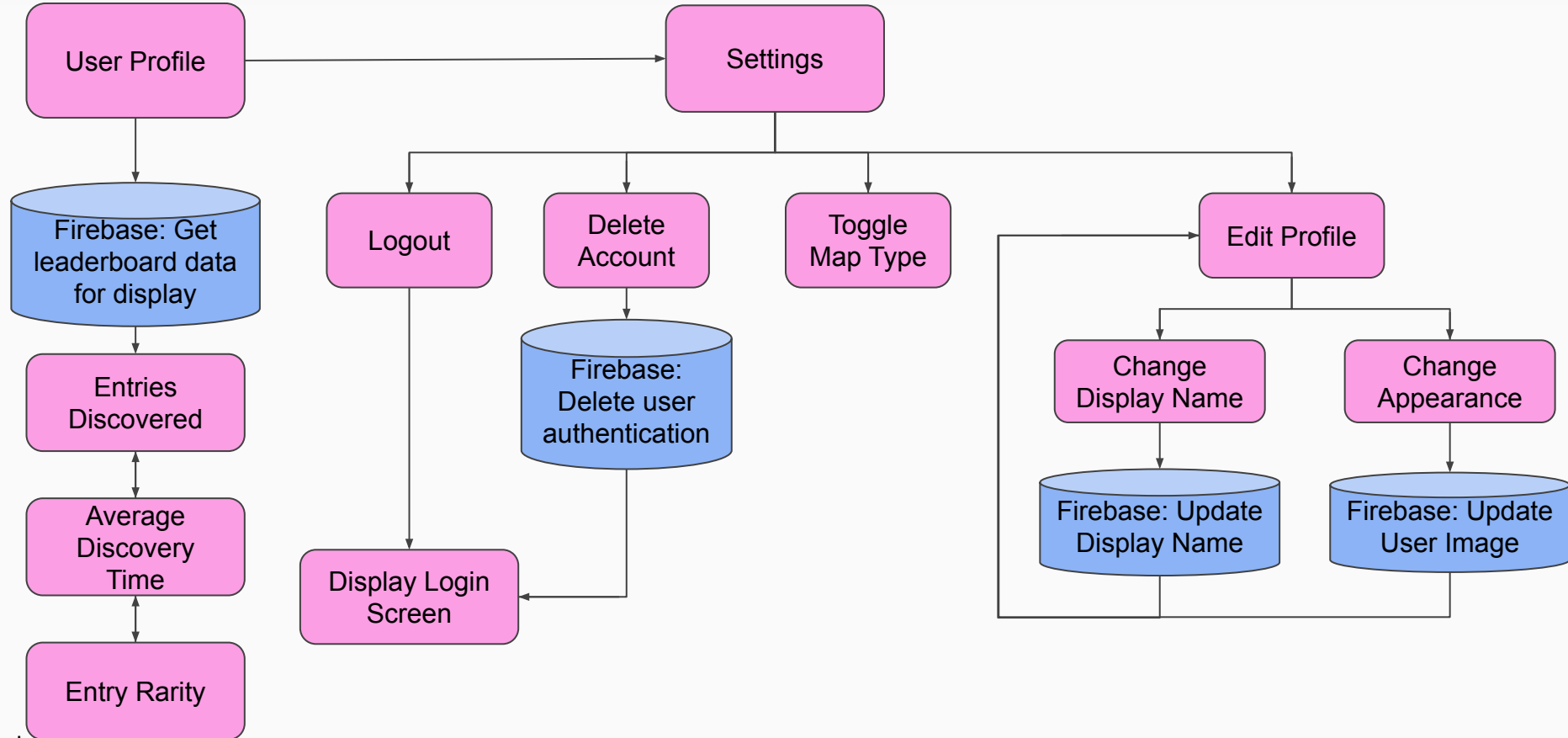
System Diagram Overview (1)



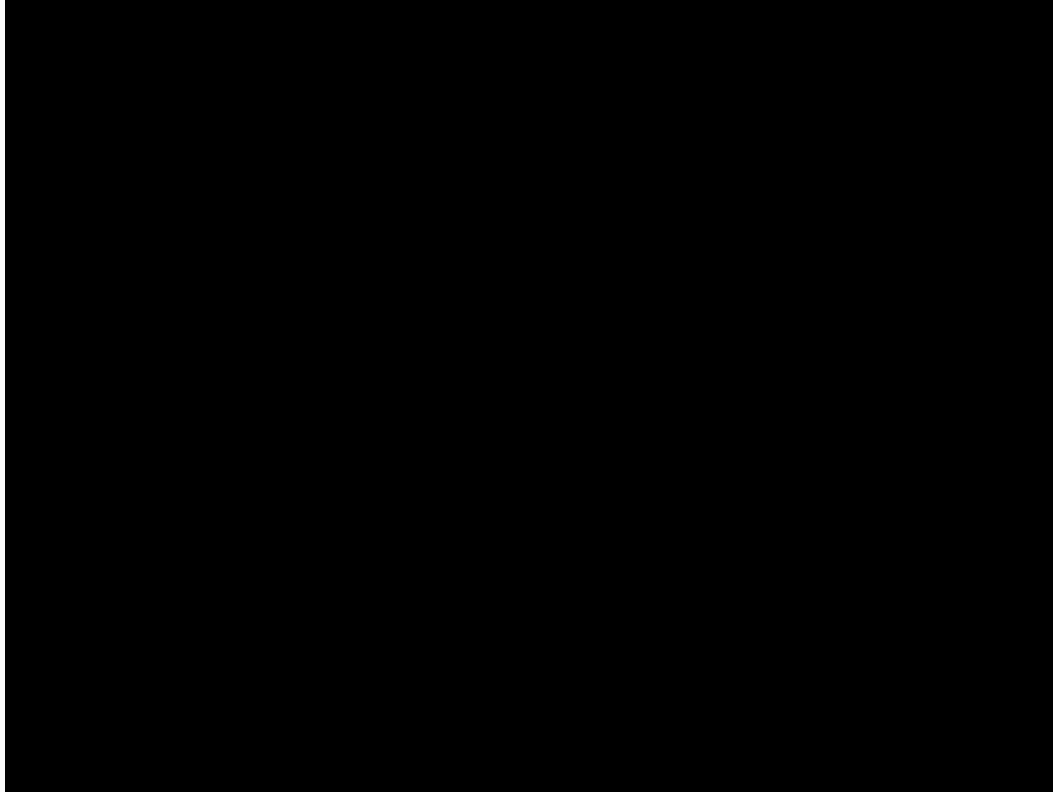
System Diagram Overview (2)



System Diagram Overview (3)



Demo



Project Management

Scrum Techniques Used

- Assigned Scrum Roles : Scrum Master, Product Owner, Developer
- 3 Weekly Scrum Meetings (In person and remote without issue)
- Trello Scrum Boards for flexible work management
- Well Organized Discord channel for consistent communication
- Agreed upon coding standard & interface driven app development pattern
- Github Version Control following best practices for small teams
- Culture of accountability and pride in code ownership

Derivations From Scrum Techniques

- Face to Face codebase merging had developers involved for conflict free continuous integration of new features

Challenges

Time Management

Learning New Technology

Front End Development / User Experience

iOS and Android Specific Bugs

Managing a Large Codebase



Retrospective

What We Liked

- Learning new technology (Flutter/Firebase)
- Learning the agile development techniques
- Being able to deliver working software frequently
- Being able to be proud of something that we produced
- Working with motivated individuals

What We Didn't Like

- While necessary, the amount of documentation
- Having to implement testing late in the development process



Retrospective

What To Keep Doing

- Maintaining constant communication
- Code collaboration
- Doing large merges together

What To Stop Doing

- Overly ambitious sprint plans
- Working in short bursts of time
- Inconsistent meeting times

What To Start Doing (In The Future)

- Automated unit tests from the start of development
- Allow for beta testers immediately after reaching MVP



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Thanks!

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