



# NiteLite

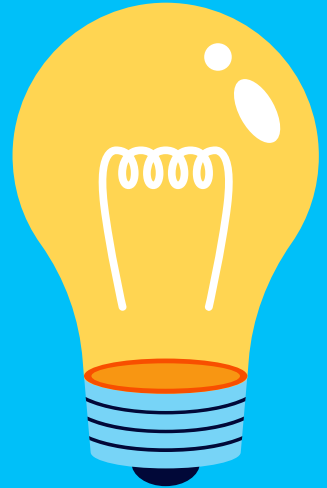
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# Project Description

Nitelite is a mobile app designed to help users feel safe by providing them with safety information about their walking route to a destination.

Takes into account:

- crime rate
- lighting on path
- user-specified safe locations
- open businesses
- busy areas





# Vision

Create a safe experience for anyone travelling via foot by providing perfect knowledge of their surroundings.

## App Goals

- allow users of NiteLite to get from Point A to Point B with more information than traditional mobile mapping services
- inform users on pertinent information on their walking route, such as lighting, busyness, and crime level
- allow users to call for help instantly if they feel they are in danger

## Project Justification

- leverage prior knowledge of React, but expand into learning how it works with mobile applications
- dive deeper into usage of APIs on large scale projects
- learn Firebase for the first time

## Relation to Other Coursework

- Managing the User Experience
- User Experience Design
- Computer Graphics



# Team Roles

- **Talia** - Design Lead & Front-End
  - Skills we have: background in React, graphic design, front-end, API integration
  - Skills we learned: Firebase, strengthened React Native + Expo skills
- **Maya** - Front-end Lead
  - Skills we have: front-end and cross-platform background in React, React Native, Redux, API Integration
  - Skills we learned: interest in learning more about backend and MongoDB
- **Shanaya** - Product Manager
  - Skills we have: mobile app development, API Integration, Google Maps API
  - Skills we learned: React Native, Redux, MongoDB
- **Lauren** - Scrum Master & Back-End
  - Skills we have: back-end development, APIs, mobile development, agile development
  - Skills we learned: React Native, Firebase, MongoDB

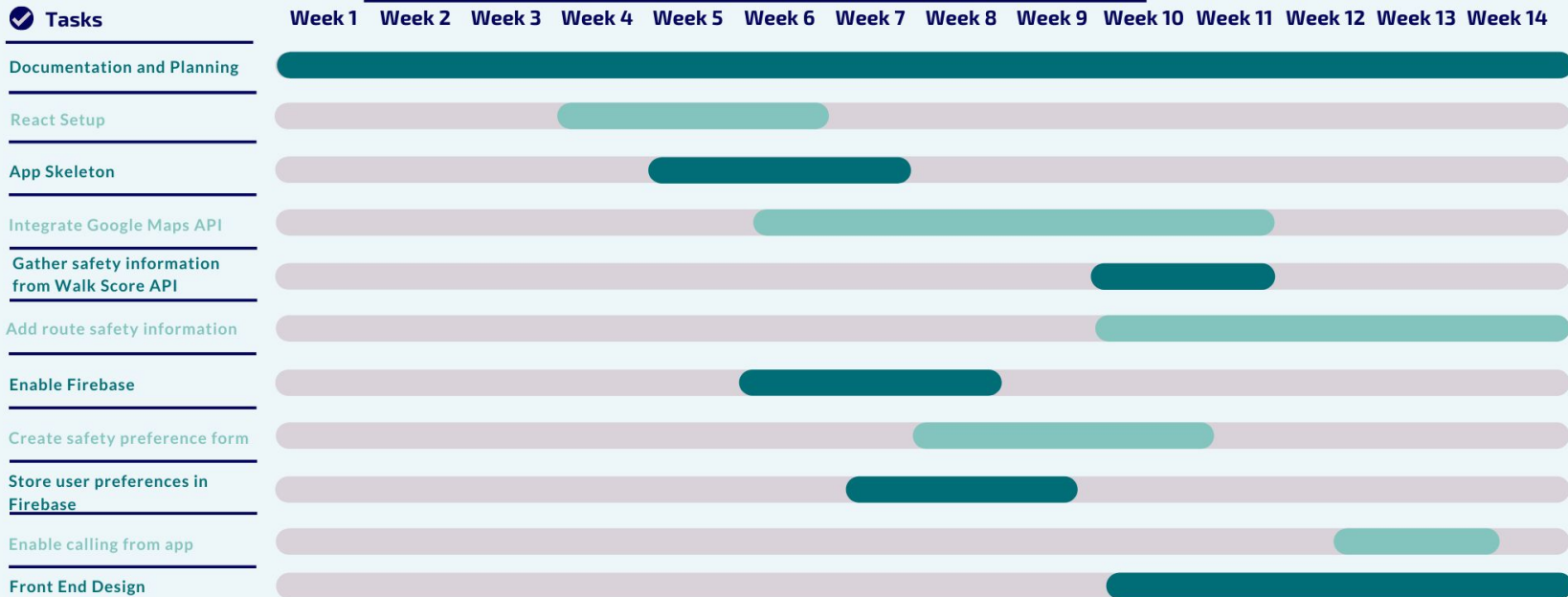


# Development Timeline

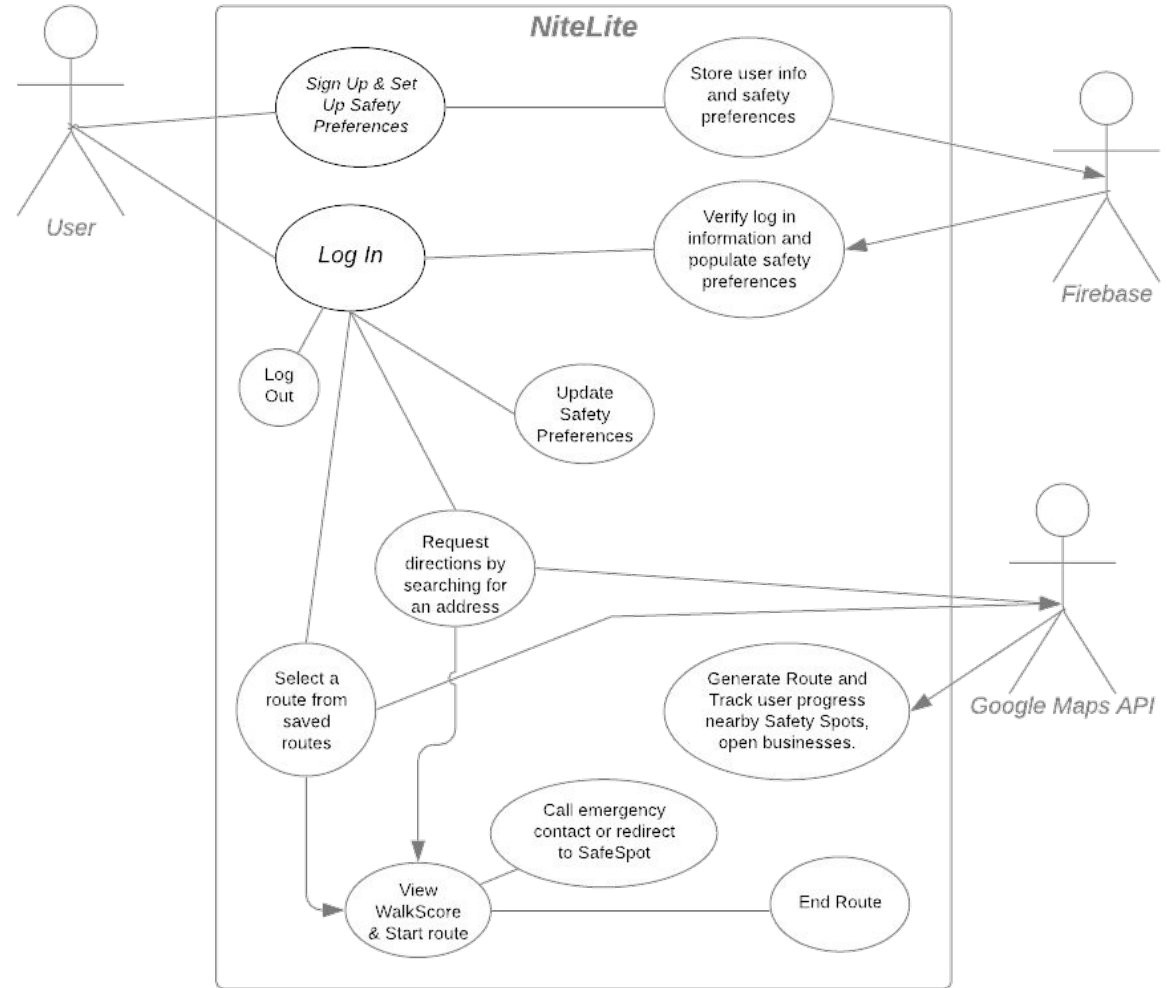
## NITELITE TIMELINE



### Tasks



# Use Case Diagram



# APIs

- Google Maps

Directions API - `getDirections` endpoint

Maps API - Markers, user current location, Map UI

Geocoding API - address  $\rightarrow$  longitude/latitude coordinates

- WalkScore API

Score endpoint





# User Stories

## **Angela**

Age: 26

Work: Financial Advisor in DTLA

Family: single, lives alone

Location: Los Angeles, CA



Bio: Angela often has to find street parking for her job; her car can be up a half mile away from the her office. She often works late at Morgan Stanley, and is worried about walking to her car in DTLA alone at night after work.

## **Damien**

Age: 13

Work: Student

Family: only child, mom, and dad

Location: Los Angeles, CA

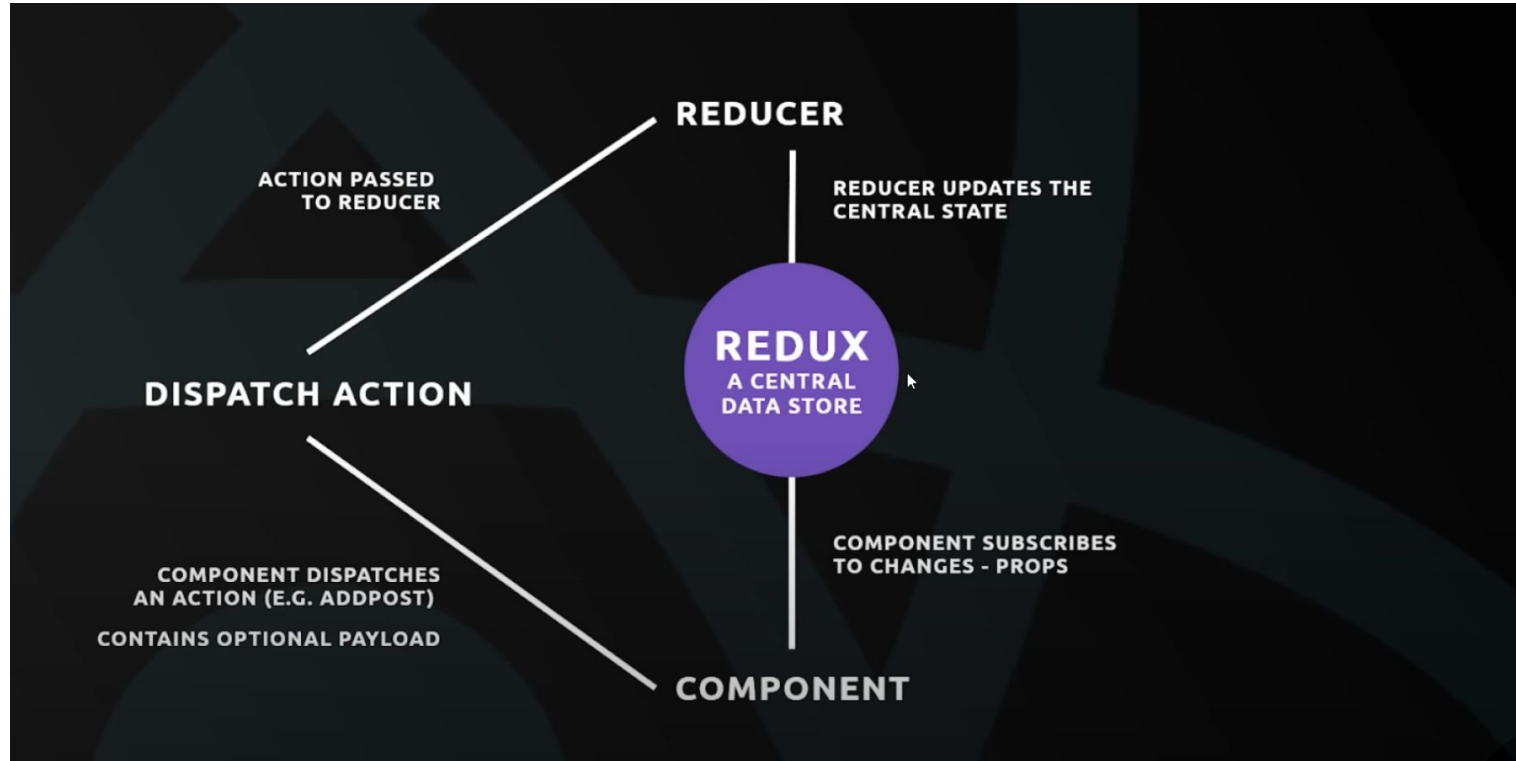


Bio: Damien plays on the soccer team at his middle school. After practice, he walks home by himself since both of his parents work late. His parents are concerned because he has to walk home alone for 2 miles, and sometimes it is already getting dark after he finishes soccer practice.

# Technology

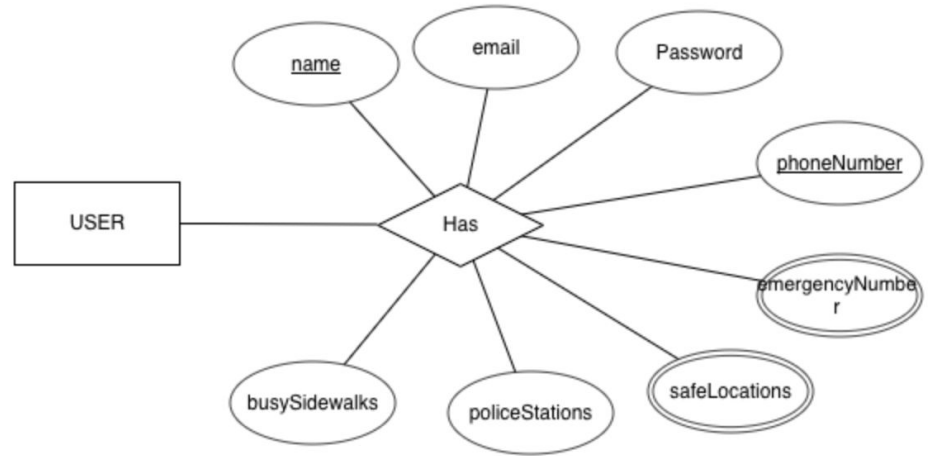


# Redux



# Firestore

```
users
├── laurenlindsey
│   ├── busySidewalks: ""
│   ├── email: "llindse3@lion.lmu.edu"
│   ├── emergencyNumber
│   │   ├── 0: "Talia Bahar"
│   │   └── 1: "3506791323"
│   ├── name: "laurenlindsey"
│   ├── openBusinesses: ""
│   ├── password: "password"
│   ├── phoneNumber: "4085076101"
│   ├── policeStations: ""
│   └── safeLocations: "1 LMU Drive Los Angeles, CA 90045"
```



# Demo



NiteLite



# NiteLite

 Username

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 Password

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# Project Challenges

- obtaining API keys, picking which API to use
  - weird interactions with API owners?
- state saving with Redux
- real time direction integration
- styling in React Native vs. React
- understanding async/await function calls with Firebase



# Status Update

## Accomplishments since last report:

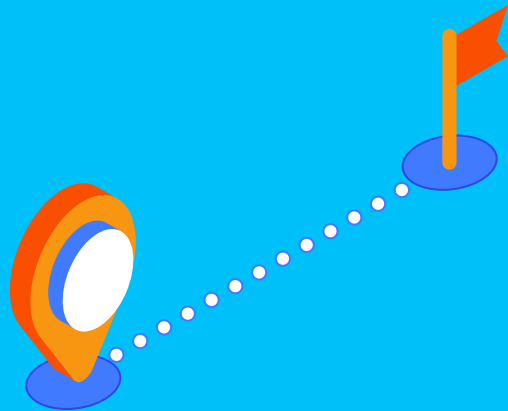
- User database, design, and map integration all came together
- Prioritized which tasks we want done by the end of the semester
- Emergency Contact calling

## Scheduled tasks to be done by next report:

- MongoDB SDK for streetlights and crimes and integrate in with app
- Store recent destinations and display on search page
- Map/route styling + adding more graphics

## Noteworthy risks, concerns, or problems:

- Google Maps directions vs. information on a live map







**Thanks for listening!**  
**Questions?**