

PARK PAL APP

Prepared by

Adwait Chavan • achava5 • achava5@uic.edu
Olesia Danchuk • odanch2 • odanch2@uic.edu
Michelle Baginski • mbagin3 • mbagin3@uic.edu
Ryan Gaul • rgaul2 • rgaul2@uic.edu

GROUP # 28 for CS 440

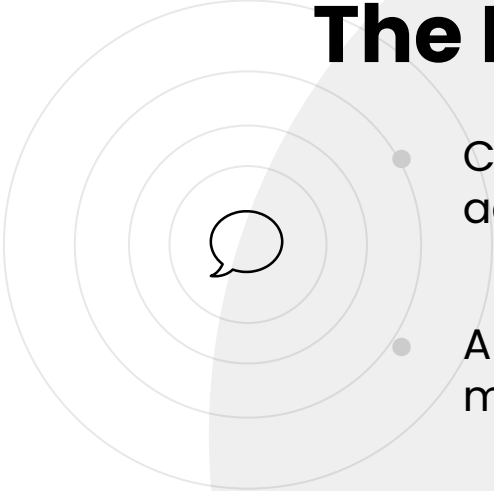


Project Overview & Purpose

- Mobile application to be used by tourists, visitors, and trekkers
- NPS workers can trace any issues and deal with them swiftly
- Allows NPS workers and visitors alike to report and see trails, events, dangers, and issues in the park
- Creates a safe and memorable experience for National Park visitors



The Purpose of the Project

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- Convenient way for users to plan park activities and travel routes
 - Allows Park employees to monitor real-time map updates
 - Displays information on park facilities and hiking trails
 - Promotes safety
 - Memorable park experience for users

Requirements

Dependability, Usability & Privacy :

- Speed and volume of requests
- Precise location tracking
- Permissions and user privacy
- Simplistic & able to be personalized



Test Plans

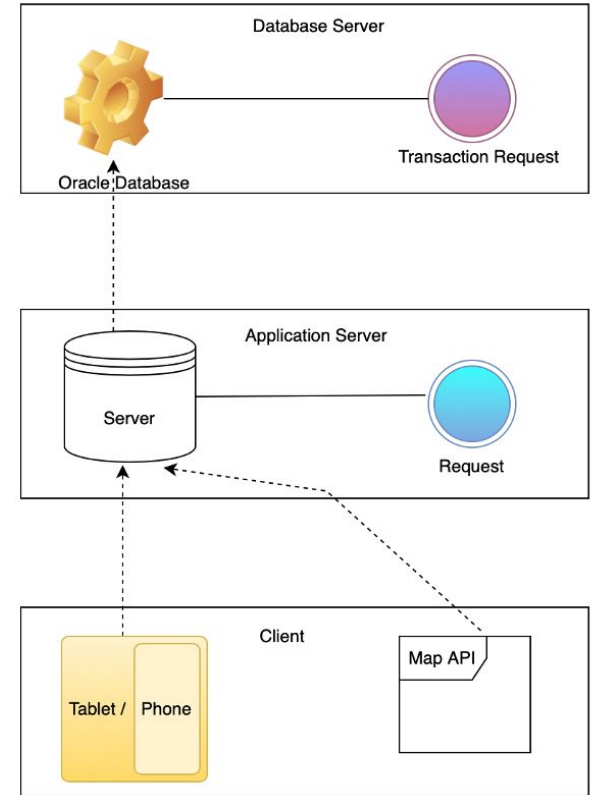


- First release should be tested in the spring for capacity and performance
- GPS & Navigation testing
- Event categories and icons
- Privacy

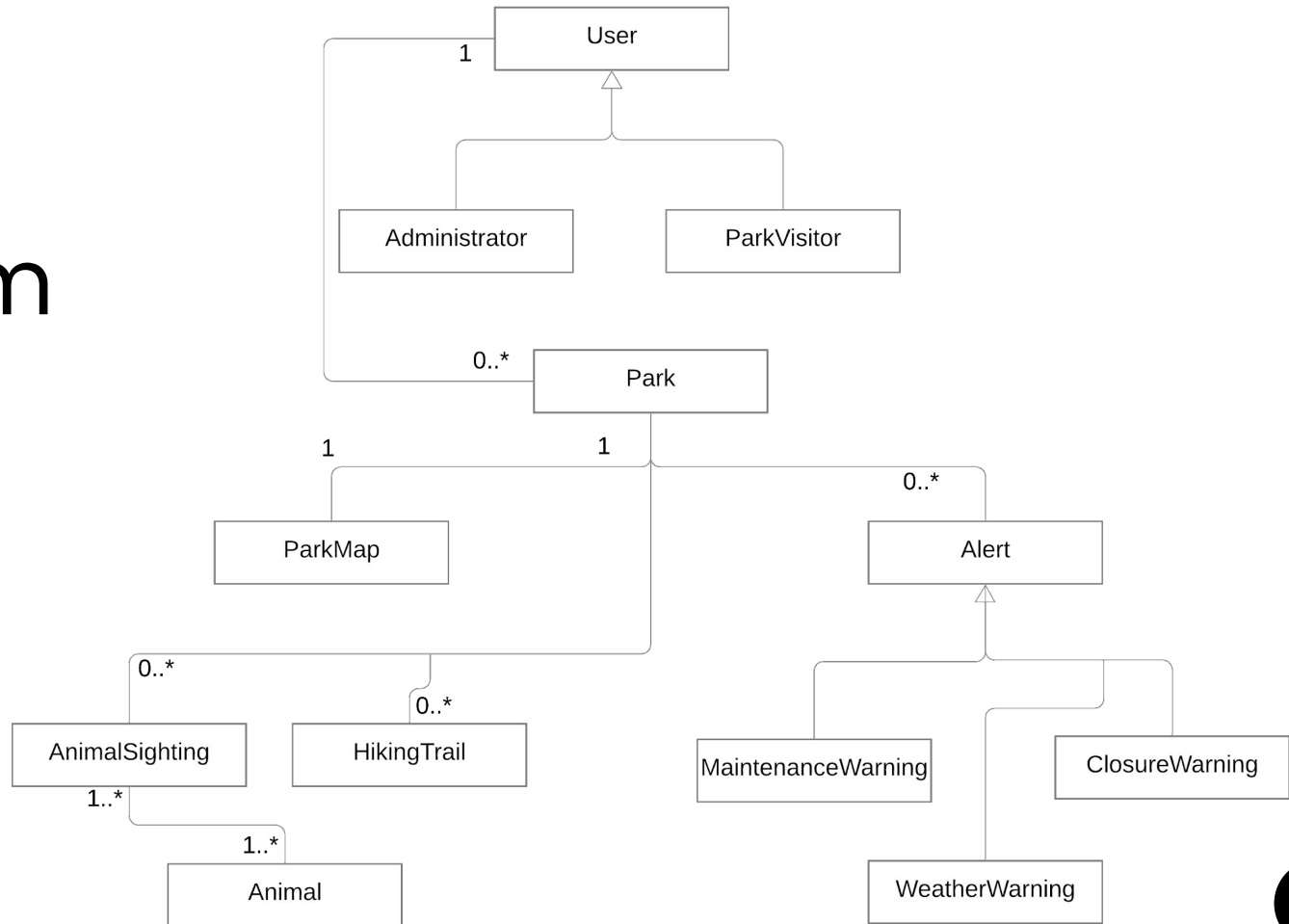


Design Goals

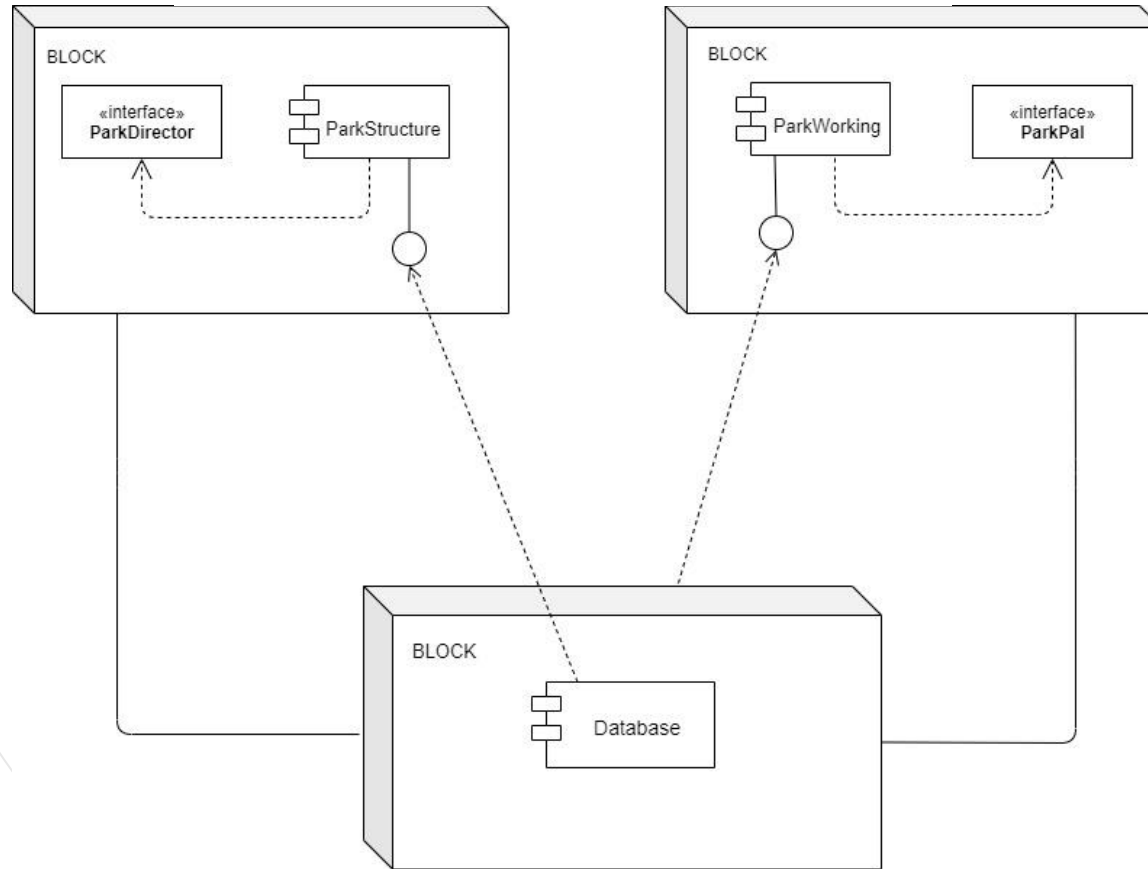
- The design goal of this system is to ensure tracking services operate accurately and with precision, and reliant on live location tracking.
- Therefore, it is absolutely necessary that a high-speed database is used, and transactions are optimized to be as fast as possible.
- Many national parks exhibit poor signal which will result in poor network connectivity and battery life for our users, so we will have to make use of battery saving techniques and caching.



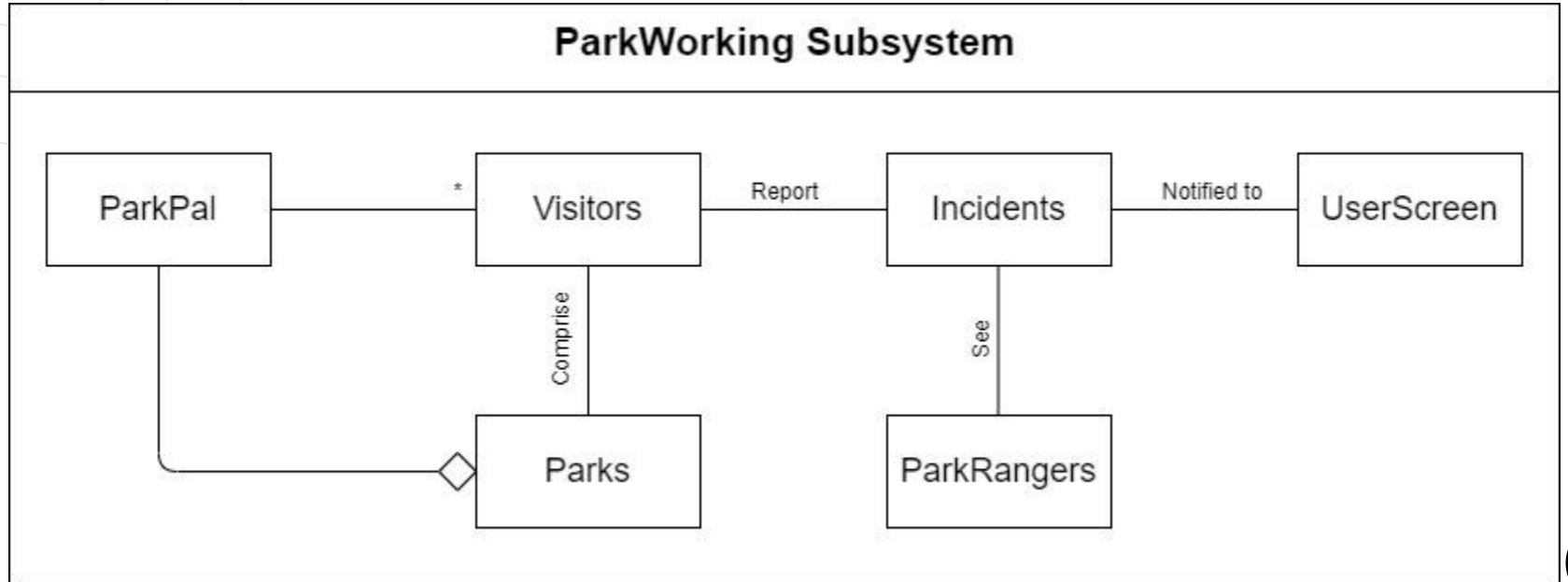
Class Diagram



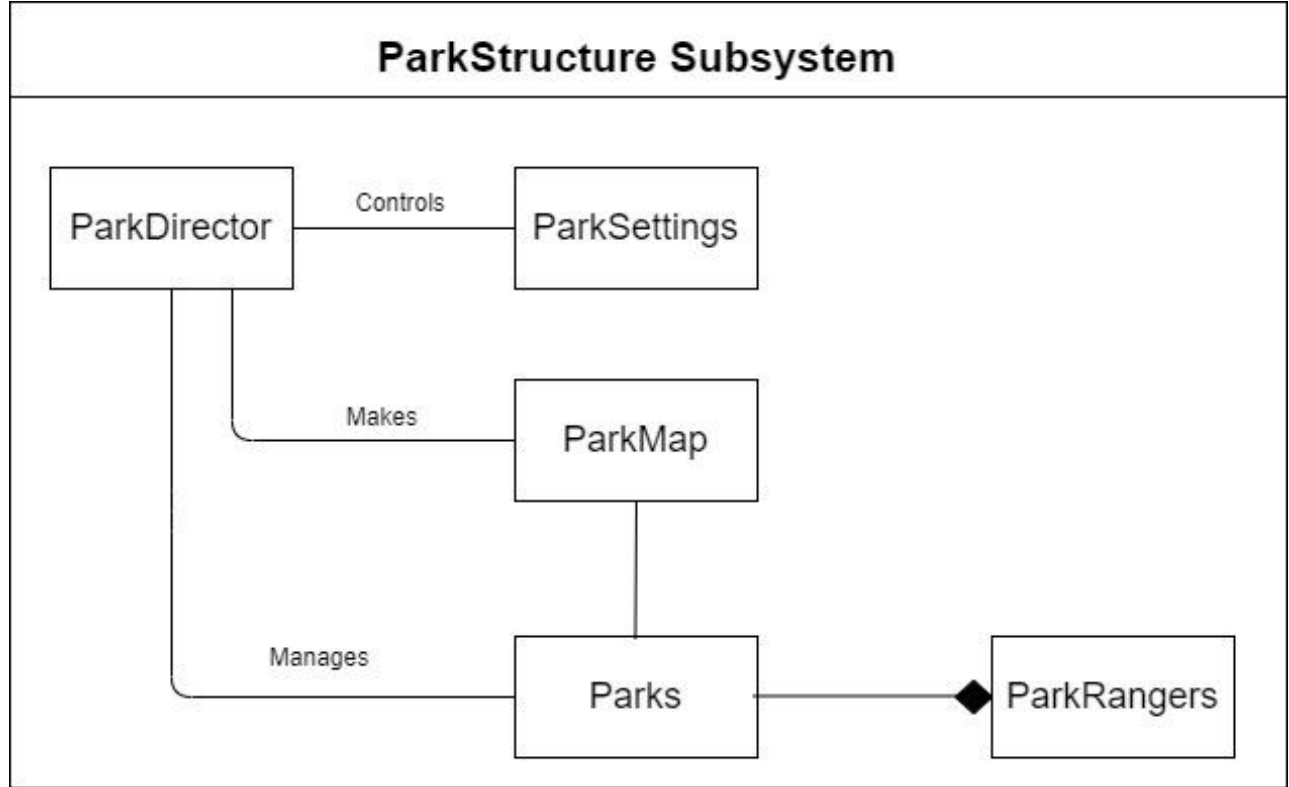
Subsystem Decomposition



Subsystem Services



Subsystem Services



Project Issues

Issues:

- Dealing with Phone Network Jammers
- Protecting user location from other users
- System to curb fake incident reporters
- Limiting area of use to only National Parks

Ideas for Solutions:

- Store information and automatically release when in network
- Anonymity in reporting if requested
- Tracking indecent pictures and information
- Use restrictions on GPS Location





Thanks!

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achava5@uic.edu • odanch2@uic.edu • mbagin3@uic.edu • rgaul2@uic.edu

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Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
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