

# LOCATOR

Campus cat locator

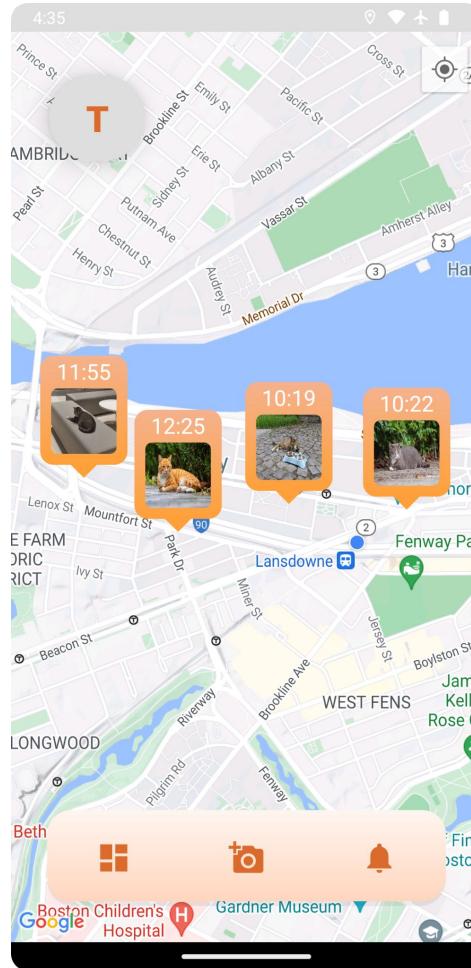
**Chunhao Bi, Yadi He**

# WHY WE NEED LOCATOR

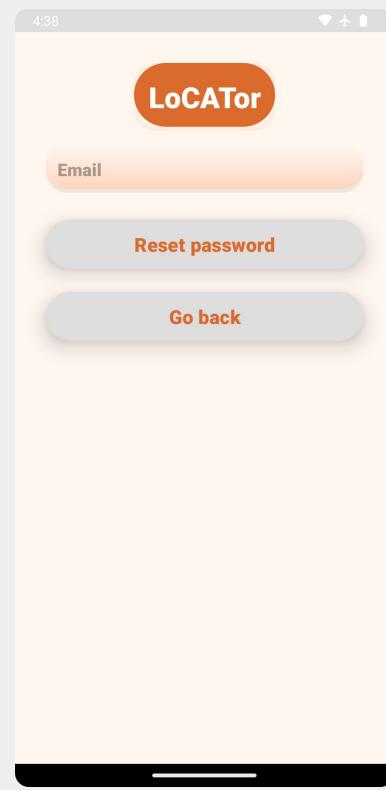
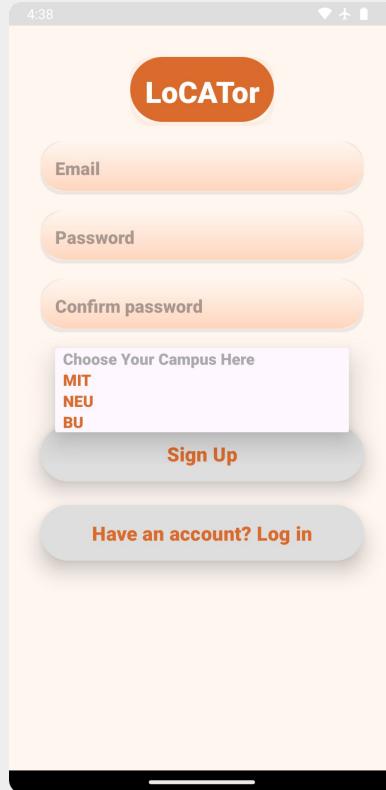
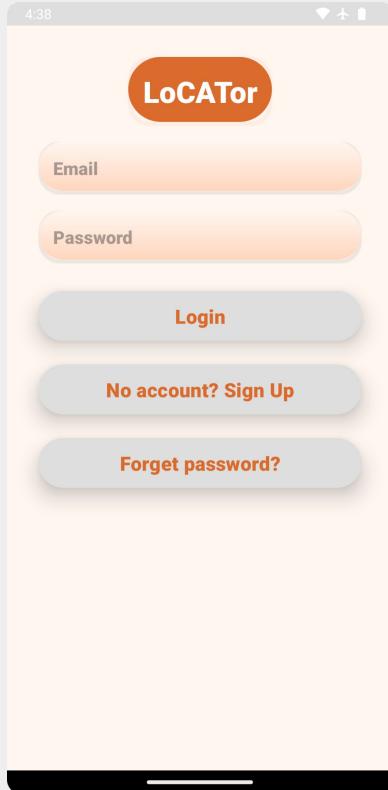


# FEATURES

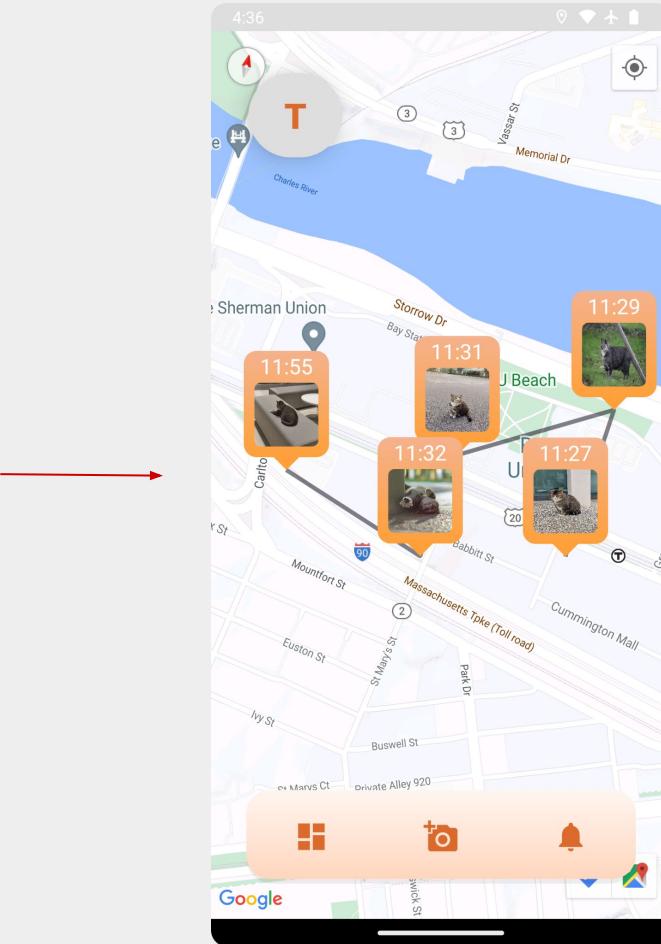
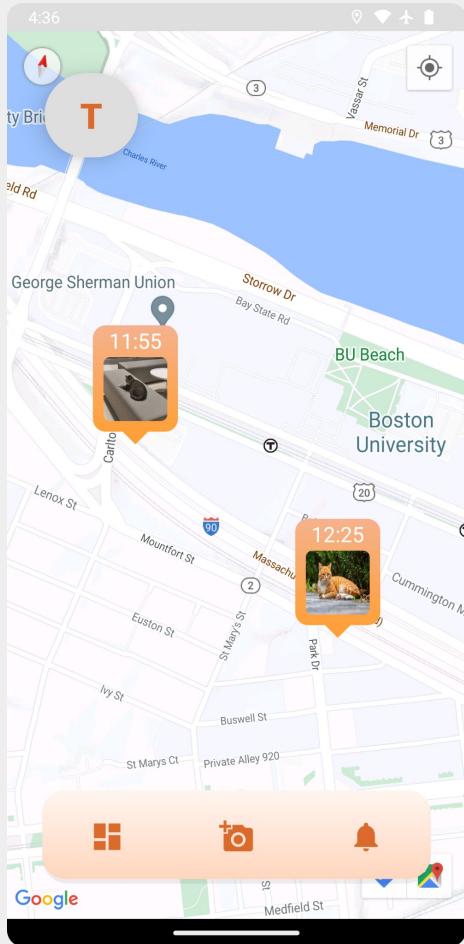
- See cats in your campus
- Register cats
- Share location when witnessed
- Track cat history
- Share photos
- Follow cats to get notification



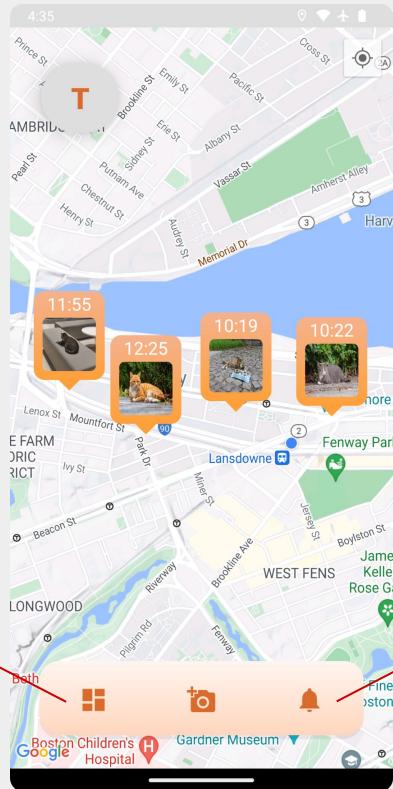
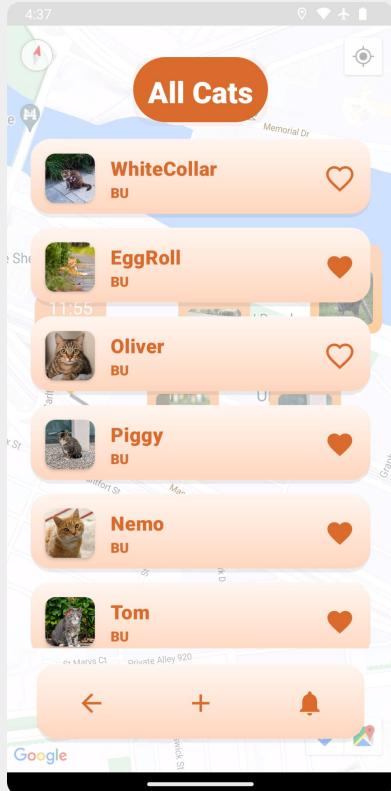
# LOGIN & SIGN UP



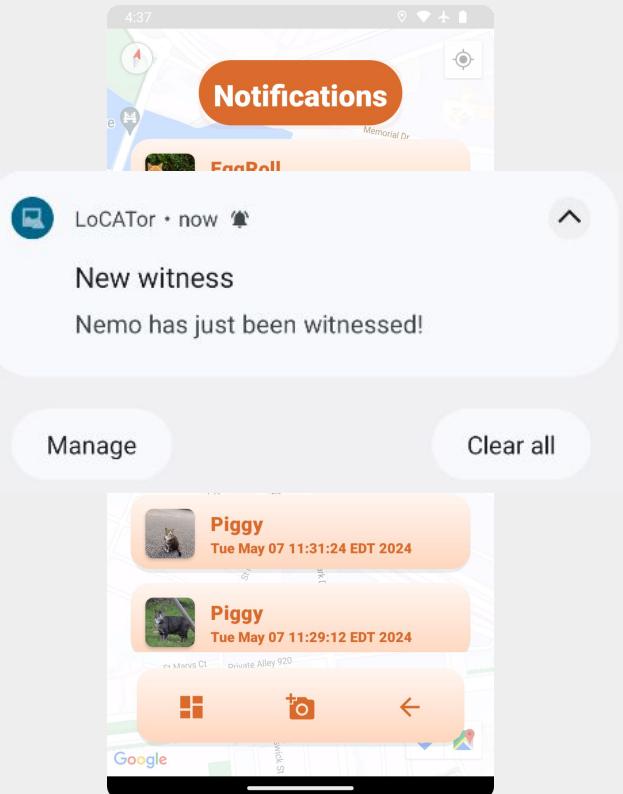
# HOME PAGE: SEE WHERE CATS ARE WITNESSED



# LIST OF ALL CATS



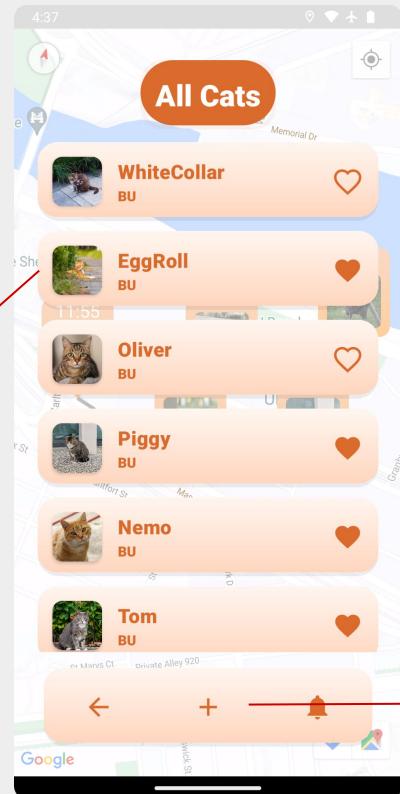
# USER NOTIFICATIONS



# CAT DETAIL



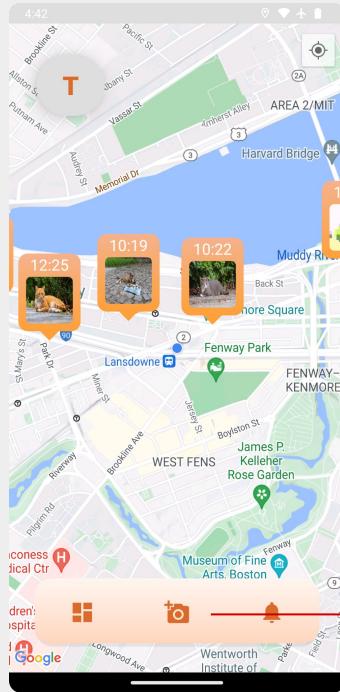
# ADD NEW CATS (MANAGER)



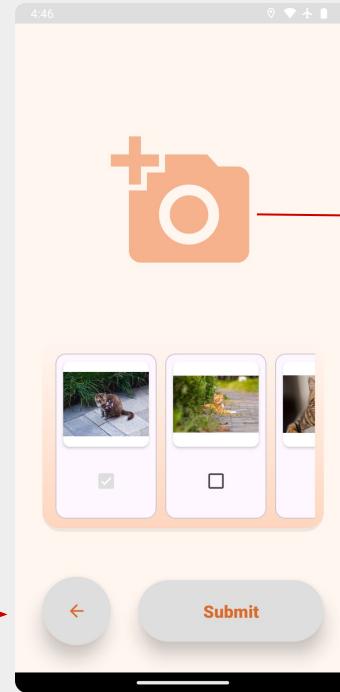
LIST OF ALL CATS



# REPORT WITNESS



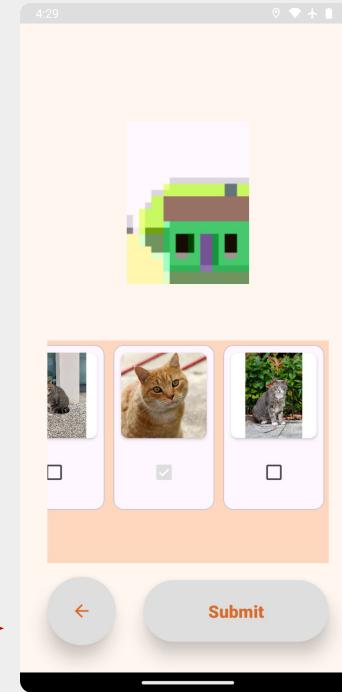
HOME PAGE



WITNESS

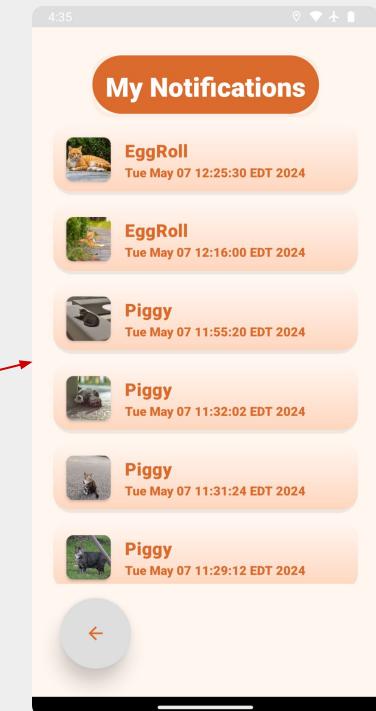
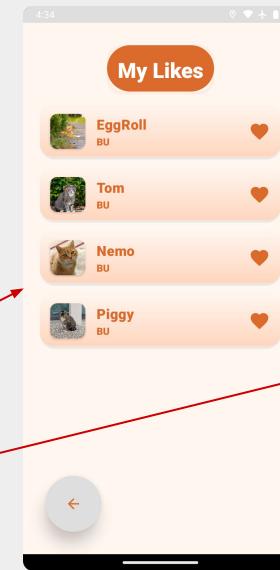
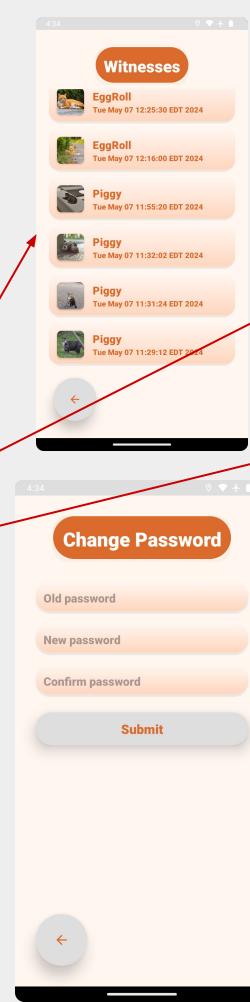
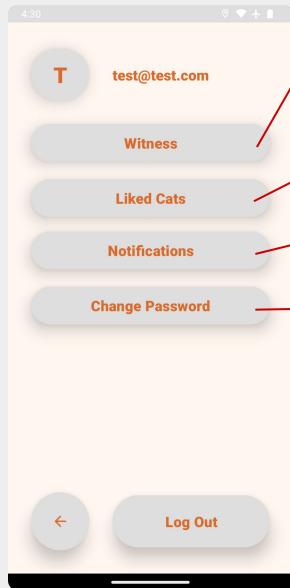
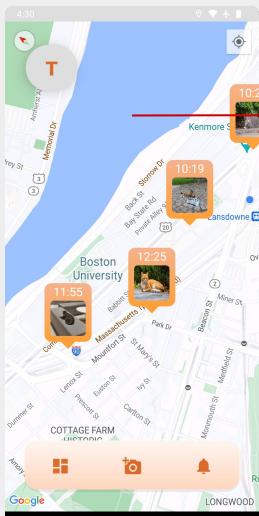


TAKE PHOTO



SUBMIT

# ACCOUNT MANAGEMENT



HOME PAGE

DEMO

# DEVELOP TOOLS

- Google Map SDK
- Material 3
- Firebase Support



Google Maps

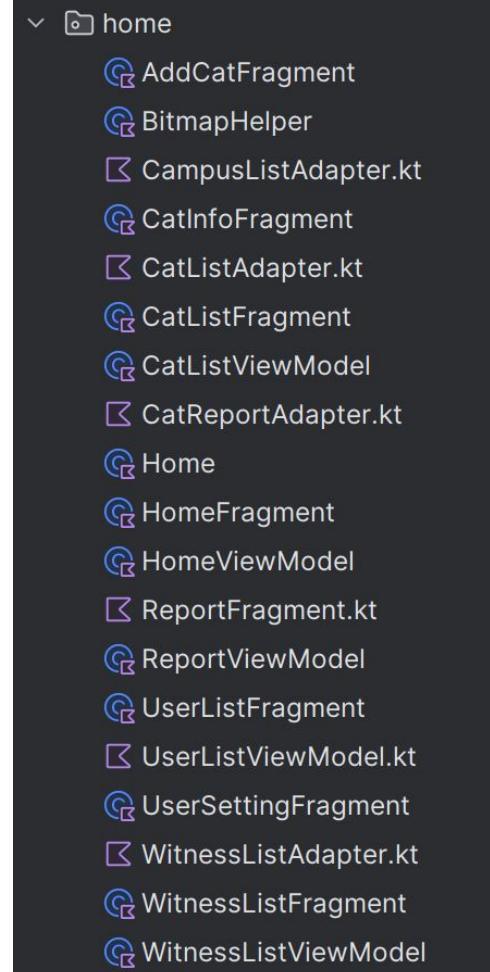
# DEVELOP ASPECTS

- Deal with maps
- Share real-time data between users
- Store/Load information in a server database
- Styling with Material



# ARCHITECTURE AND DESIGN

- **LoCATorRepo** - Bridge, Observee, Singleton
- **DatabaseImpl** - Handle db request
- **MainActivity** - Login, Signup, Enter homepage
- **Home fragments** - Main UI, Observers



# HOME NAVIGATION

- Navigate between fragments
- Using NavController
- Using RecyclerView for lists



# WHAT IF?

- For styling, use Jetpack Compose (Composable!)
- Use more built-in callback functions instead of interfaces (messy)

# FUTURE WORK

- Optimize code (reduce database fetch requests, reduce refreshes)
- More styles (customize animations, sliding, welcome UI, loading page)

THANKS!