



Ex-scavenge-anza!

Scavenger Hunts Made Easy!



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Evolution of Project

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Initial

- Flutter
 - IOS and Android
- Google Maps API
- AWS RDS MySQL

Revisions

- Android Studio
 - Android only
- Leaflet
- Firebase
- Functional changes

Flutter vs. Android Studio

Flutter

- Peer pressure
- Wider audience base
- Dart - new language
- Lack of documentation/support
 - Zero documentation for Google Maps API

Android Studio

- Java
- Lots of documentation
- Familiarity with Android Studio
- Compatibility with Google Maps API



Android Studio

Google Maps API vs. Leaflet

Google Maps

- Requires payment
- Easier to implement
- Already on Android Studio
- A lot of Documentation

Leaflet

- FREE
- Open source
- More adaptable and accessible
- Easy API
- Uses Open Street Maps
- Github repositories/examples



AWS RDS MySQL vs. Firebase

AWS RDS MySQL

- Free with Student ID
- Overall, pretty good
- Cannot resize database

Firebase

- Real-time Database
- Cloud storage makes data readily available everywhere
- Authentication
- Compatible with Android Studio
- Easy, breezy, accessible: FIREBASE



Firebase

Functional Changes

- Point System
- Incorrect Location
 - Clue Codes
- Host/Participant Logins
- Limited Number of Hunts

Roles

Previously:

- Database: Priyanka
- GUI: Dane
- Maps: Ariana
- User Management: Mabelyn

Now:

- Database: Mabelyn / Dane
- Integration: Dane / Mabelyn
- GUI: Priyanka
- Maps: Ariana

Code

```
function addPOI(e){
    var id;
    if(markers.length<1){
        id=0;
    }else{
        id=markers[markers.length-1]._id+1;
    }

    var markerPOI = new L.marker(e.latlng, {draggable:false}).addTo(map);
    markerPOI._id=id;
    markerPOI.bindPopup('lat, lng at this POI: ' +
        e.latlng.toString() + '</br>' +
        '<poi clue ssdfkjlfdskl </br>' +
        '<button onclick="inputClue"> Edit Clues</button> ' +
        '<button onclick="removePOI(' + id +
        ')"> Remove POI</button></br>').openPopup();
    map.addLayer(markerPOI);
    markers.push(markerPOI);
}
```

Test Plan



Testing

- Manual Testing
- Resolution Testing
- Error Checking
- Correct Popup Messages
- Correct Participant Location
- Sending/Receiving of Clues to Database

Demo

Questions?