

# ERP-coin Requirements and Design Documentation

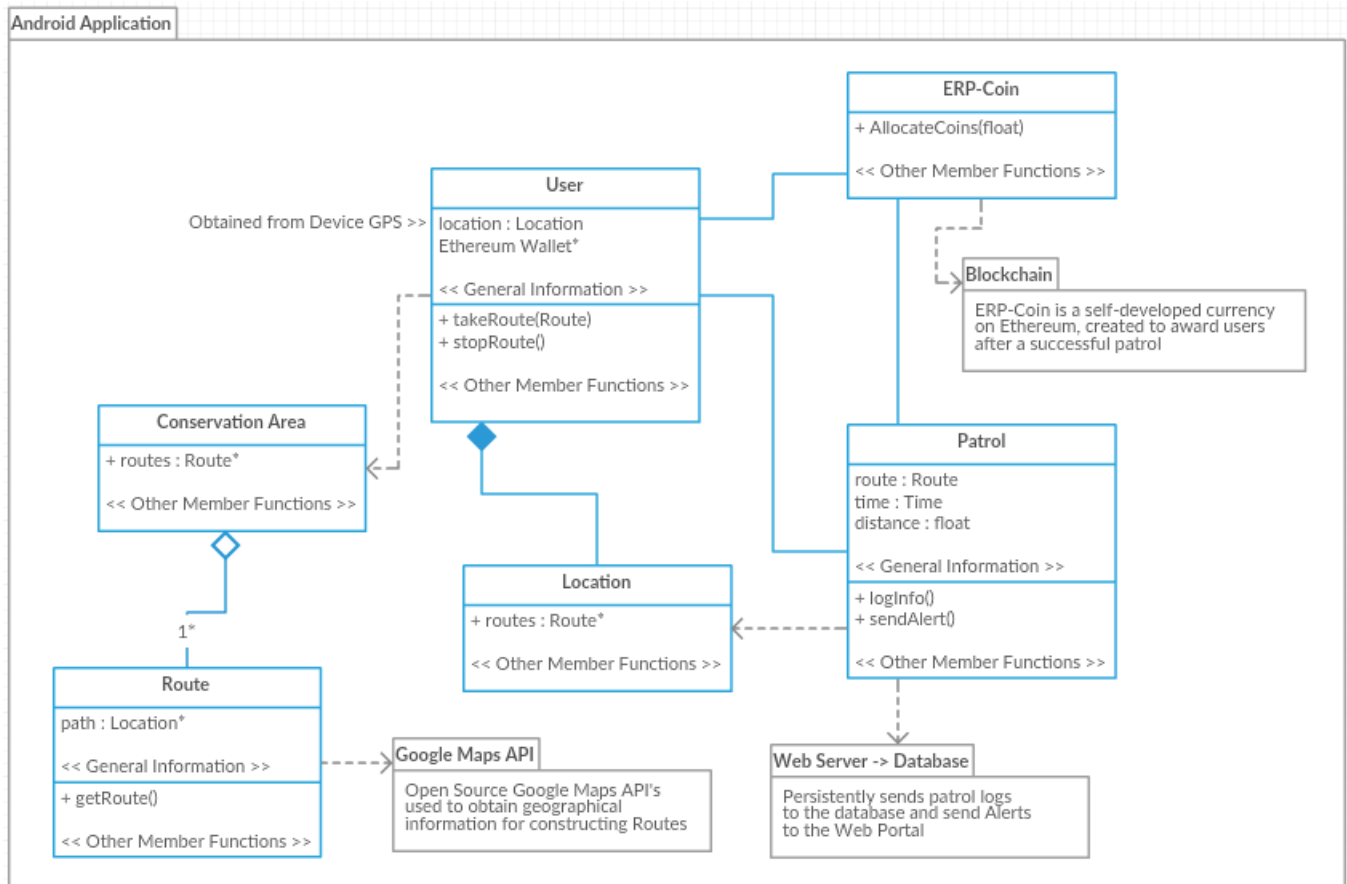
TeamTuring

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## 1 Functional requirments:

1. User onboarding and profile management.
2. View list of available conservation areas.
3. Indicate arrival at a conservation area.
4. Get recommended routes:
  - Routes that was least recently traveled.
  - Routes with a lot of observations, notes or alerts issued.
  - Shortest route for the time that users have available for patrol.
  - Some routes might give users more points than others.
5. Start patrolling:
  - The app will track time and distance of users surveillance route.
  - Only surveillance routes within the white listed area should be logged.
6. Users must be able to capture notes and pictures of any rhino sightings, suspicious activities or general behaviours. This should be linked to your current location.
7. Must be able to send out an alert with a specific security level.
8. Once patrolling is complete , the user must be awarded with a number of tokens.

## 2 Domain model:



### 3 System architecture:

The system has been designed as a three tier architecture. The system will need to be highly interactive and constantly respond to user request while also tracking them during this patrol. This architecture allows for the user system to consist of three sub components the Presentation layer, the Application layer and the Data layer. This creates low coupling between these subsystems allowing each one to function on a different device. The Presentation layer will run on the user device while the Application layer will run on a central node while the Data layer will run on a secure remote site.

