

Killi Trecker System Design Specification

Yousif, Kelly, David

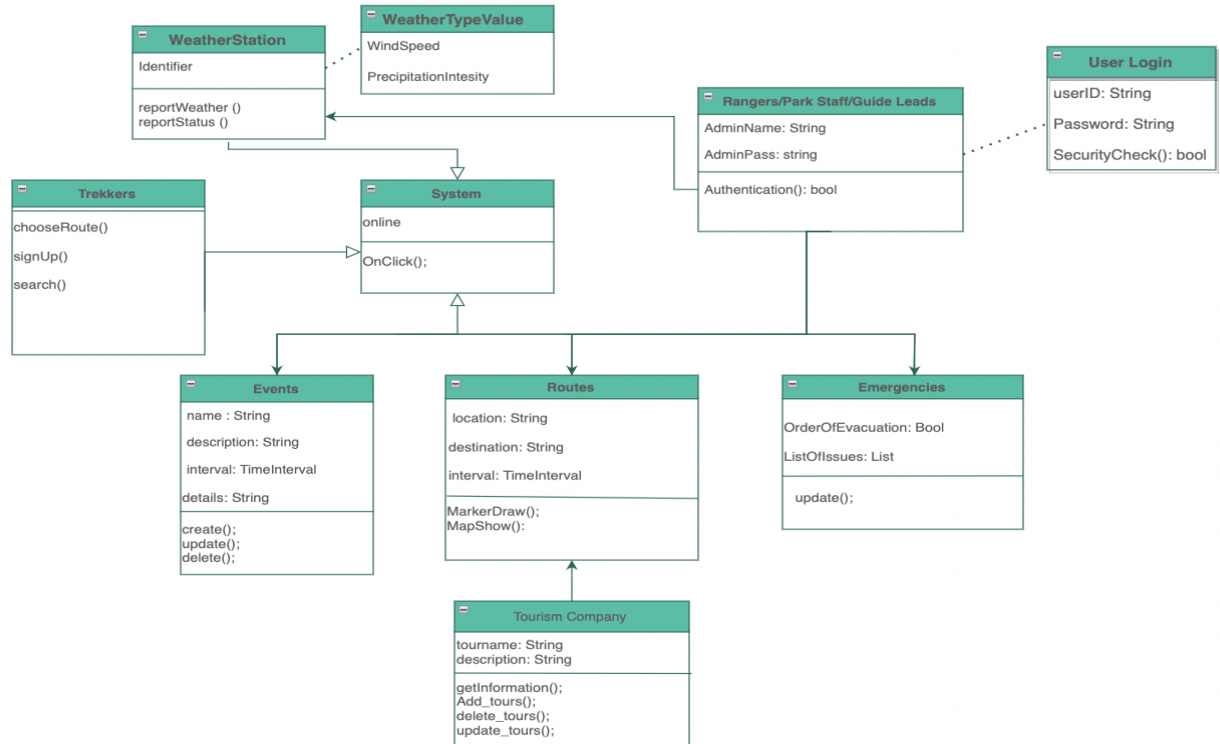
System Description

The Kilimanjaro national parks would like to make a system to allow tourists in the park to get info that they need. The software system must provide means of representing and accessing data transferred between servers. The system will be able to evaluate weather conditions with a camera that is mounted on top of the mountain. The park goer's will be able to get the information by going to the park's official website on their computers or phones. The most important design goal for the site is that it's easily usable by everyone who needs information in the park.

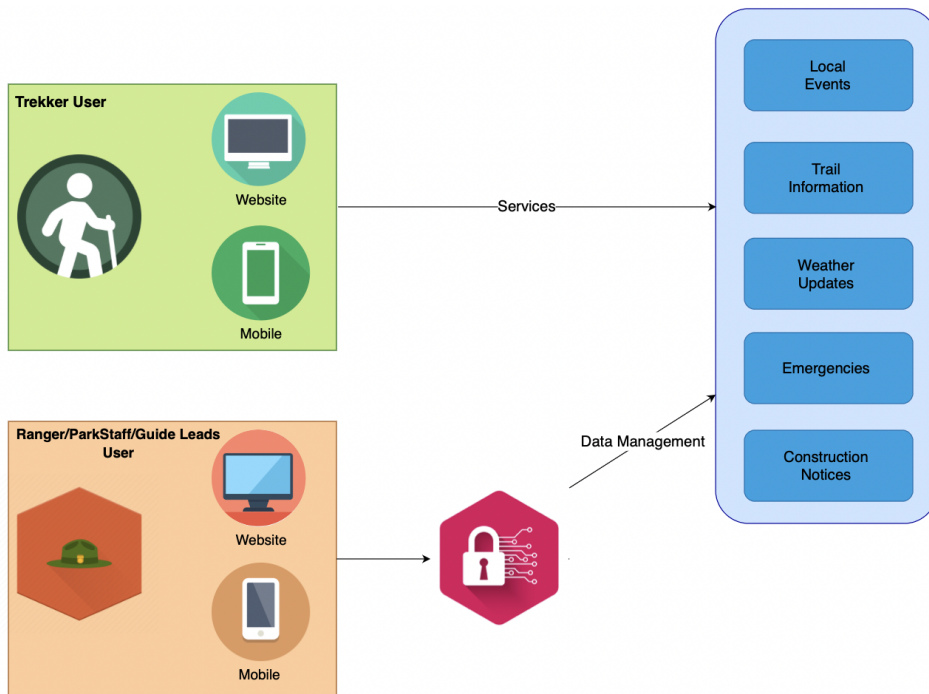
Diagram explanation:

- **User Login**
 - This is where the string of the userID will be stored along with the password in a database that also contains a security check regarding the individual identification
- **Ranger/Park Staff/Guide Leads**
 - This will be admin(Ranger) who is able to access the system/hub which displays everything for tourists, staff, and guides. The system will require him to specifically sign in with his provided username and password with authentication to his identity as an admin.
- **[Emergencies, Routes, Events, Weather Conditions]**
 - **The Ranger** will have the ability to **update, modify, delete, and display the information on the system.**
 - **Emergencies:** The emergency will have a bool value of true or false which will be displayed along with the emergency name and will be updated in case there is an emergency like extreme weather conditions.
 - **Routes:** All the routes in the park will be displayed with their respective location,, which links to google maps,, name, and time interval which will represent how long the tour will run.
 - **Events:** In case of an event being created or updated by the **admin(Ranger)** it will immediately display on the system for tourists/staff/guides to see the event's name, description of the event, and the time the event will run for.
 - **Weather Conditions:** The weather will be monitored by the camera. The camera will watch the park trials condition and weather all the time. It will notify the system for any shift in the weather. **The Ranger** then will be able to change the weather condition name which can range anything from "Good weather" or "Bad weather" etc. It will also keep track of the weather's temperature. It will always be on the system just in case the tourist or staff wants to view it.

UML Class Diagram:



Architecture Diagram:



Tasks:

- Backend Development:
 - Server - Kelly
 - Testing - Yousif
- Frontend Development:
 - UI Design - David
 - Time: 2 months
 - CSS/HTML - David
 - Time: 3 months
 - Javascript - Kelly
 - Time: 3 months
 - Testing - Yousif
 - Time: 2 months