WatsLoo

Private Github repository link: https://github.com/646-group8/mobile-app

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Implemented Functionality

Our application Watsloo is created to provide a platform for senior students/University staff to share their unique stories about University of Waterloo (UW). It can also guide new UW students to explore the main campus of UW. With the help of Watsloo, new students can have a sense of the life and the culture in UW, and this will make it easier for them to get started with their own journey in this amazing campus! In General, Watsloo provides four main functions:
1) overview to see stories scatter in every corner of the campus;
2) following mode to discover the amazing stories around you;
3) reading the detailed description and image to experience the joy and sadness happened in here;
4) Sharing your unique experience in UW with other students. The details of these four functions are described as follows.

The overview mode can be accessed by clicking the “OverView Mode” button in the scroll bar of the main activity. It provides a birdview of all interesting spots around UW campus which were contributed by our app’s users. On the overview map, the boundary of UW campus is outlined; and buildings, benches, lakes, and other meaningful spots are identified with red color markers. In this mode, users can see where the amazing stories happened. Users can zoom in, zoom out and move the map to explore more interesting spots on campus. By long click of the map, users can change the map type from normal to satellite or hybrid type. The overview pattern gives the audience a general impression about the layout of campus and locations of the meaningful activities.

In the following mode, the contents displayed in the map are triggered by the user’s movement. By displaying the makers along the path while the user is traveling, this app can help the user to discover more of the interesting stories along the user’s travelling path. This mode can give users an immersive experience about the shining stories that other students had at the specific locations. Besides, Eastern Egg can also be found if one is lucky enough.

Our app had implemented a lot of interfaces from Google Map API, which utilizes the GPS function of mobile devices. Firstly, only the Eastern Eggs which are within 20-meter-range can be detected and displayed on the user's screen. This will encourage users to explore the campus more with our app. Secondly, the camera view of the map changes as the user changes location and orientation. Finally, the user's location is displayed as a blue dot. By clicking it, the user can upload a new spot in this position. This mode is dedicated for the users which are currently located on campus.

The fun details and beautiful pictures can be read when users click the marked spots on the map. The page will jump to a list of stories related to this particular spot. Each item in the list shows the title of the story, and users can click on whatever story they want to read from the list. In the story's detail page, it shows the interesting contents with vivid pictures. Users can jump into the “Upload a New Story” activity to add a new story which happened in the same place by clicking the “Submit My Story” button on the bottom.

Users can also click “Upload a New Story” in the main activity to upload their own stories and interesting pictures related to spots. The stories uploaded by our users will be available to the public once it passes the regular audit conducted by our team members. The purpose of this audit is to make sure no illegal information/miss leading content is delivered to the public. Before uploading a new story, the app will check and require three permissions from users: the permission to obtain the user’s real-time GPS information, the permission to read a picture from the album and extract GPS information from the picture, and the permission to take a picture via the system's camera app. If the user decides to choose a picture with GPS information attached, our app can extract the longitude and latitude from the EXIF and display the picture; whereas if the picture chosen has no GPS information, the app prompts the user to manually input the longitude and latitude. If the user decides to take a picture, the app can display the user’s current GPS information in a related textview. After the user has input all the required information such as the name of the place, descriptions or stories, the user can click the “Submit” button to submit this story to our database.

Functionality Remains Unimplemented

We have not finished the like and comment functionality.

At the beginning, we aimed to add this auxiliary functionality to the application if time allows. The function allows users to and comment on other people’s stories, so as to interacting with people who upload the story or comment on the story. However, considering the potential risks of users’ s data security and privacy, we are not going to implement this function. If we implement this functionality, users need to sign up with usernames and phone numbers, which leads to security issues exposing the user account and phone number. This may discourage users from being willing to use our app and share their stories. Besides, users even sometimes want to anonymously upload their stories, perhaps because of embarrassment and shyness, or out of concern for privacy.

Ultimately, we end up with users editing their own stories and uploading photos to share with others through our app, our app taps into the creative, interesting, image-based life of people in Waterloo.