**Use Case 4: View Local Events**

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| Use Case Element | The user wants to examine what areas in the local community are prone to what types of activities. |
| Use Case Number | 5 |
| Application | The function relates to the GPS functionality of the application. |
| Use Case Name | View Local Events |
| Use Case Description | A user wants to examine the local area around them and see what areas are provide or are prone to what activities, based on a parameter inputted by the user. |
| Primary Actor | The user trying to use the application to find out what activities happen in what areas. |
| Precondition | 1. The user must have access to the internet. 2. The area the user is operating in has access to satellite or cell tower transmissions. 3. The user must have the GPS receiver functionality of their mobile device enabled. |
| Trigger | The user clicks the activities tab and inputs what activities they wish to see displayed on the area map. |
| Basic Flow | 1. The user clicks on the activates tab and selects an activity/s they wish to see displayed on the map. 2. The application reads the current GPS location of the user. 3. The application sends a query request to the database, based on the activity/s the user select and their current location. 4. The database queries its tables for a match between the activity/s the user is interested in, and the area the user is currently located in. 5. The database returns a collection to the application containing the activities the user is interested in and the locations they are located in. 6. The application loads up the map of the area around the user and displays the locations of the activity/s the user is interested in. |
| Alternate Flows | 1. The user is currently located in an area where due to technical reasons they are unable to receive GPS transmissions. The application displays a message to the user saying it cannot get a reading of the current area. 2. The database was unable to find any activities in the user’s current local area. The application displays a ‘No Activities Found’ message to the user. |

Use Case: Examine Crime Areas

User

Cloud Server

Database

Applications

Select Activity

Show Activities on Map

Activity Request

Query Tables

Return Activity List

Send Activity List

Send User Data

Satellite

Cell-Tower

Send GPS Location

Transmit Location

Click on Activity