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| Outbreak Smartphone App for iPhone  Use Case: Proximity Detection |

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Use Case: Proximity Detection

# Proximity Detection

## Brief Description

This use case allows the user to gather the people around them from stored GPS coordinates of all online players.

## Requirements trace

12, 13

## Involved actors

iPhone User

## Pre-conditions

* The system has already started begin instant spread

## Post-conditions

* System returns nearby users

## Invariants

* Mathematical distance formula( Haversine )

# FLOW EVENTS

## Basic flow

This use case starts when the user wants to get the distances of the other users around them

* + 1. User chooses to find other local online users
    2. The iPhone connects to the web server
    3. The system runs the GPS distance calculation of each online player in the database
    4. The database returns data containing each online player within a certain distance to the web server
    5. The web server packs up the information and sends it to the iPhone

# Extension Points – None

# Scenarios

## Happy day

Assumptions: User – Sean

Signal - Above TOO\_LOW\_SIGNAL\_STRENGTH

Steps:

* + 1. Sean chooses to find other local online users
    2. The iPhone connects to the web server
    3. The system runs the GPS distance calculation of each online player in the database
    4. The database returns data containing each online player within a certain distance to the web server
    5. The web server packs up the information and sends it to the iPhone

## Rainy Day – No Connection to web server

Assumptions: User – Sean

Signal – TOO\_LOW\_SIGNAL\_STRENGTH

Steps:

* + 1. Sean chooses to find other local online users
    2. The iPhone attempts to connect to the web server
    3. The system alerts Sean that he has poor signal strength and recommends GETTING THE FUCK OUT OF THE TREES while navigating away from online mode.