**Release and Iteration Plans**

**Just Zed**

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Release Plan

# **Release 1**

Delivery date:

Total Story Points: 50

Provide a basic networking system to allow the caretaker’s device to connect to the patient's device. Get a working gps system to track the location of the patient and create some basic geofencing. As well as adding some form of messaging system between the devices so that the patient and caretaker can keep in contact.

## Basic Location Tracking and Geofencing

The caretakers will be able to track the patient's location and add some virtual fences to the map. If the patient is outside a fenced zone, the caretakers will receive a notification.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **38** | As a patient I would like to connect my device to my caretaker’s device, so that he can get some data of me. | 4 |
| **4** | As a patient, I want to make sure only my caretaker has my location so that i feel safe. | 11 |
| **6** | As a caretaker, I would like to be able to see my patient’s approximate current location, so that i can keep track of him. | 6 |
| **7** | As a caretaker, I want to be able specify a safe zone on the map, so that i know the patient is where he should be. | 20 |
| **8** | As a caretaker, i would like to receive a notification when a patient leaves or enters (if he has previously left) a fenced zone so that i can be made aware of any odd behavior from the patient. | 3 |
|  | Story Point Sub-Total: | 44 |

## Communication Feature

The patient and caretakers will be able to communicate with each other. The patient will be able to press an emergency button that will send a notification to the caretakers devices.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **16** | As a patient, i would like to be able to notify the caretaker whenever i feel there is an emergency so that I can get help if I ever need it | 6 |
|  | Story Point Sub-Total: | 6 |

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# **Release 2**

Delivery date: 13/09/15

Total Story Points: 27

Provide a more advanced method of virtual fence creation. Adding a calendar/ time based reminder system. Creating reports for the caretaker so that he can analyse the movement patterns of the patient.

## Location and Messaging

The patient and caretakers will be able to communicate with each other. The patient will be able to press an emergency button that will send a notification to the caretakers devices.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **9** | As a patient, i would like to be able to leave the virtual fenced zones without triggering an alarm when I'm with the caretaker so that get some freedom to move around. | 5 |
| **17** | As a patient, i would like to be able to send and receive messages from the caretaker so that i can easily keep in contact with him. | 8 |
| **17.5** | Make alerts more visible | 1 |
|  | Story Point Sub-Total: | 14 |

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## Advanced Geofencing

Being able to draw shapes and paths, setting virtual fences based on a timer and on a calendar/ schedule.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **10** | As a caretaker, i want to be able to add tunnels | 7 |
| **12** | As a caretaker, i would like to be able to set different virtual fences based on timer, so that i can set temporary fences without having to remove them manually. | 6 |
|  | Story Point Sub-Total: | 13 |

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# **Release 3**

Delivery date: 10/11/15

Total Story Points: 27

Provides information on the patient's health and send an emergency notification if it looks like the patient had an accident. Will allow each caretaker to potentially have multiple patients. Will also add a more complex memo system that will use audio recordings. Some extra location features such as a search bar and direction for the patient will be added.

## Advanced Geofencing

Being able to draw shapes and paths, setting virtual fences based on a timer and on a calendar/ schedule.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **13** | As a caretaker, I want to tie fences to a calendar so that i can plan ahead of time | 8 |
|  | Story Point Sub-Total: | 8 |

## 

## Calendar/Reminder System

The caretaker will be able to set reminders for the patient of what he/she is supposed to do, based on a schedule/calendar.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **24** | As a caretaker i would like to schedule when i receive a patient's records (health, movement, etc...) so that i can organise my time more efficiently | 2 |
| **25** | As a caretaker, I need to send reminders to the patient of his/her daily tasks (such as medication), so that the patients wouldn't miss what they have to do | 4 |
|  | Story Point Sub-Total: | 6 |

## 

## Data Management - Movement Patterns

The caretaker will be able to get reports of the movement patterns of the patient.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **21** | As a caretaker i would like to get some data of the patients movement patterns during the day, so that i can get some insight on how to set the virtual fences. | 8 |
|  | Story Point Sub-Total: | 8 |

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## Data Management - Health and Multi Patient Profiles

The caretaker will be able to manage information about the patient’s health state and have different patients linked to his phone.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **22** | As a caretaker i would like to get some data on the patient's health (steps per day, heartbeat, etc..) so that i can keep track of his well-being | 8 |
| **23** | As a caretaker, I want different profiles for different patients so that i can manage multiple patients | 4 |
| **26** | As a patient, I want to be reminded of things using audio recordings (pick up their keys,lock the front door) so that i don't have to look at the watch. | 4 |
|  | Story Point Sub-Total: | 12 |

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## Extra Location Features

The caretaker will be able to search the map for specific locations. The patient’s direction and speed will also appear on the map.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **14** | As a caretaker, I want to be able to search the map for places so that i can find places that my patient wants to go | 1 |
| **15** | As a caretaker, i would like to know the direction of the patient and how fast he is traveling to get an idea of where he is going and if he is in a vehicle. | 8 |
|  | Story Point Sub-Total: | 9 |

## 

## Extra Communication/Emergency Features

The patient will be able to access the call function of the device through the app to allow him to contact the caretaker more easily. The caretaker will receive a message if it seems like the patient has fallen.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **18** | As a patient, I want to be able to call the caretaker so that I can keep in contact with him | 2 |
| **19** | As a caretaker, I want to know immediately if the patient falls down so that i can call for help immediately | 4 |
|  | Story Point Sub-Total: | 6 |

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# **Release 4**

Delivery date: 08/12/15

Total Story Points: 20

Provides advanced features for helping patient's memory and linking the patient to multiple caretakers.

## Extra Features

Four extra features will be provided, which include multiple caretaker system, memory training and recording memos.

|  |  |  |
| --- | --- | --- |
| **Story ID** | **Story Title** | **Story Points** |
| **28** | As a caretaker, i would like to be able to record voice memos for the patient, so that i can help him remember things. | 4 |
| **29** | As a patient, I want to be able to have multiple caretakers, so they can live their lives. | 4 |
| **30** | As a patient, I want to have some application/game that helps me train my memory, to help improve condition. | 8 |
| **31** | As a patient, i would like to be able to record memos so that i can remember things. | 4 |
|  | Story Point Sub-Total: | 20 |

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# **Delivery Schedule**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week 5 Aug. 18 | Week 6 Aug. 25 | Week 7 Sep. 1 | Week 8 Sep. 8 | Week 9 Sep. 15 | Week 10 Sep. 22 | Mid-Semester Break | Week 11 Oct. 6 | Week 12 Oct. 13 |
| Iteration 1 | | Iteration 2 | | Iteration 3 | | Iteration 4 | |
| Release 1  Sept. 8 | | | | Release 2  Oct. 13 | | | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Oct. 20 | Oct 27 | Nov. 3 | Nov 10 | Nov 17 | Nov 24 | Dec 1 | Dec 8 |
| Iteration 5 | | Iteration 6 | | Iteration 7 | | Iteration 8 | |
| Release 3  Nov 10 | | | | Release 4  Dec 8 | | | |

Estimated Velocity: 15

Iteration Plan

# **Iteration 1**

Total Story Points: 25 Total Hours:150.5

Current Velocity: 20

## 38: Patient/Caretaker device connection basic

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T01** | Write test cases | 4.5 | 4.5 |
| **T02** | Connect both apps to the parse.com database (cloud db) | 2 | 2 |
| **T03** | Have both devices synchronise with each other and the database | 12 | 12 |
| **T03.5** | Set up databases | 1 | 1 |
| **T04** | Verify story is complete (acceptance test) | 0.5 | 0.5 |
|  | Story Points: 4 Total Hours: | 20 | 20 |

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## 4: Patient/ Caretaker token based connection

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T06** | Setup base UI for Patient and Caretaker app | 7 | 7 |
| **T07** | Work out NFC sending mechanism on Patient app | 9 | 9 |
| **T08** | Work out NFC receiving mechanism on Caretaker app | 12 | 12 |
| **T10** | Save and sync both tokens to cloud db | 26 | 26 |
| **T12** | Verify story is complete (acceptance test) | 0.5 | 0.5 |
| **T50** | Integrate all NFC related activities / modules | 11.5 | 11.5\* |
|  | Story Points: 11 Total Hours: | 66 | 66 |

\* more Integration tests and unit tests required

## 6: Patient tracking

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T14** | Patient location data layer | 4 | 4 |
| **T15** | create background service to poll and save location on patient | 9 | 1 |
| **T16** | get location from db and show location (map) on caretaker | 18.5 | 8 |
| **T17** | Verify story is complete (acceptance test) | 1 | - |
|  | Story Points: 6 Total Hours: | 32.5 | 13 |

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## 16: Emergency panic button

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T19** | Work out a notification mechanism from patient to caretaker | 24 | 16 |
| **T20** | UI for panic button | 7 | - |
| **T21** | Verify story is complete (acceptance test) | 1 | - |
|  | Story Points: 6 Total Hours: | 32 | 16 |

\*Task not completed (not integrated in the system, finished or tested.)

# **Iteration 2**

Total Story Points: 28 Total Hours: 168.5

Current Velocity: 25

## 6: Patient tracking

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T15** | create background service to poll and save location on patient | 8 | 8 |
| **T16** | get location from db and show location (map) on caretaker (cont) | 10.5 | 10.5 |
| **T17** | Integrate the location system into the build | 4.5 | 4.5 |
| **T17.5** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 4 Total Hours: | 23 | 23 |

## 16: Emergency panic button

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T19** | Work out a notification mechanism from patient to caretaker | 8 | 8 |
| **T20** | UI for panic button | 7 | 7 |
| **T21** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 3 Total Hours: | 16 | 16 |

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## 7: Basic geofencing

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T22.5** | Research | 14 | 14 |
| **T23** | Add/Remove geofences on the map | 40 | 28\* |
| **T23.5** | Edit a geofence on the map | 24 | 14\* |
| **T24** | Create geofence database | 4 | 4 |
| **T25** | Integrate the location system into the build (menu for main activity) | 11 | 5\* |
| **T26** | UI for the map and Geofencing | 18 | 18 |
| **T25.5** | Verify story is complete (acceptance test) | 1 |  |
|  | Story Points: 19 Total Hours: | 112 | 93\* |

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## 8: Patient leaving notification

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T27** | Check if the patient has left a geo fenced zone on the patient's device (using the database) | 11 | 11 |
| **T28** | Send Notification to the caretaker | 1 | 1 |
| **T29** | Integrate the Geofencing Notification System into the build | 4.5 | 4.5 |
| **T29.5** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 3 Total Hours: | 17.5 | 17.5 |

# **Iteration 3**

Total Story Points: 11 (20 with refactoring) Total Hours: 117.5

Current Velocity:20

## 7: Basic geofencing

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T23** | Add/Remove geofences on the map | 12 | 12 |
| **T23.5** | Edit a geofence on the map | 10 | 10 |
| **T25** | Integrate the location system into the build (menu for main activity) | 6 | 6 |
| **T25.5** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 5 Total Hours: | 29 | 29 |

## #: Refactoring and Fixes

|  |  |  |
| --- | --- | --- |
| Task Description | Estimate | Taken |
| Refactor Save Sync | 3 | 2 |
| Refactor Geofence Checks | 3.5 | 3.5 |
| Fix documentation and graphs | 30 | 30 |
| Integration to build | 1 | 1 |
| Story Points: 9 Total Hours: | 55.5 | 55.5 |

## 9: Leaving fence with caretaker

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T30** | Research (use of database or bluetooth) | 6 | 6 |
| **T31** | Create a button that turns off geofence checks on the caretaker’s device (caretaker) | 7 | 7 |
| **T31.5** | Improve the Person datalayer | 6 | 6 |
| **T32** | Create a button that turns off geofence checks on the caretaker’s device (patient) | 1 | 1 |
| **T32.5** | Turn off notification system (if patient and caretaker are connected via bluetooth) (unused) | 7 | 7 |
| **T33** | Integration to build | 1 | 1 |
| **T33.5** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 5 Total Hours: | 29 | 29 |

## 17.5: More prominent notifications

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T39** | System wide alert box | 2 | 2 |
| **T42** | Integration to build | 1 | 1 |
| **T43** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 1 Total Hours: | 4 | 4 |

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# **Iteration 4**

Total story Points: 21 Total Hours: 131

Current velocity: 20

## 12: Timer based fences

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T49** | Upgrade added fence UI to handle timers | 18 | 14 |
| **T50** | Database update (add start time, end time) | 4 | 4 |
| **T52** | Don't check disabled fences on the patient device | 3.5 | 3.5 |
| **T53** | Check the timer against the patient system time | 7 | 7 |
| **T54** | Integration to build | 5 | 5 |
| **T55** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 6 Total Hours: | 38.5 | 34.5 |

## 10: Advance geofencing: Tunnels

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T45** | Tunnels (extending the current UI) | 35 | 35 |
| **T46** | Database update(add geofence groups unique group id) | 1.5 | 1.5 |
| **T48** | Integration to build | 6 | 6 |
| **T48.5** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 7 Total Hours: | 43.5 | 43.5 |

## 

## 17: Send and receive messages

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Task Description | Estimate | Taken |
| **T36** | Add patient caretaker names to the application (UI) | 4 | 4 |
| **T36.51** | Type message from the caretaker’s device (UI) | 13 | 13 |
| **T36.52** | Choose a premade message from the patient’s phone (UI) - | 17 | 17 |
| **T37** | Send message to the other device (upgrade notification system) | 8 | - |
| **T38** | Integration to build | 6 | 6 |
| **T38.5** | Verify story is complete (acceptance test) | 1 | 1 |
|  | Story Points: 8 Total Hours: | 49 | 41 |

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