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# Acceptance Test Deliverable Document

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# Contents

# 1 Introduction

## 1.1 Scope

In this document we present the implementation for the software "TrackMe". The main purpose of the application was already touched in the REQUIREMENT ANALYSIS AND SPECIFICATION DOCUMENT and into the DESIGN DOCUMENT (see Reference documents), this document will be therefore the used in order to show the implementation and to explain why such an implementation was chosen as well as showing the algorithms that were specifically designed for the application.

## 1.2 Document Contents

The document will be composed of Three main sections:

- Installation Setup: We will discuss what we did to install the prototype and discuss as well problems with the installation and stuff that it's incoherent with the documentation that was given in support to this prototype.
- Acceptance test cases: We are going to extract test cases by analyzing the RASD the other team has developed and test some functions
- Additional Infos and Other Issues: We are going to comment issues or give additional infos regarding the implementation

## 1.3 Revision History

Version 1.0 Released on January 22th,2018 - 7 pm

## 1.4 Analyzed Project Identification

### 1.4.1 Authors

Javier Fernandez
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### 1.4.2 Repository link

The link to the repository can be found at: *https://github.com/javferrod/CuellarFernandez*

### 1.4.3 Reference Documents

- Mandatory Project Assignment AY 2018-2019.pdf
- Implementation and Testing Project Assignment
- https://github.com/javferrod/CuellarFernandez/tree/master/DeliveryFolder (RASD,ITD,DD)

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# 2 Installation Setup

## 2.1 Given Instructions

The instructions that are provided to us are necessary to install the app in the android version and to access the web app in the browser version.

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# 3 Acceptance Test Cases

In the following lines we will write the tests that we performed on the application, we will divide it in three separate section, Passed Tests, Failed Tests and Pending Tests.

## 3.1 Passed Tests

- **FR1**: When an user opens the application and no log-in had been performed, the system shall show the welcome page
  **Additional Comments**: Both the web and the android application successfully showed a welcome page.

- **FR8-9**: The system shall prompt the user to introduce the manual parameters at fixed time intervals and store the measures in the server.
  **Additional Comments**: Once in a while the app will request weight data

- **FR10**:When a client has sent a request for access, the system shall display a notification in the user's device showing the name of the client which requires the permission and a button to accept.
  **Additional Comments**: The request system is working

- **FR15**: When the client introduces a query from the dashboard page (figure 9) and the number of entries that fullfil the query are equal or more than 1000, the system shall show the data in page (Figures 10, 11 and 12)
  **Additional comments**: For checking the acceptance of this requirement, we have navigated to the "Query" page and then inserted as filter values: Age between 86 and 92, Weight between 83 and 116, Heartrate between 208 and 300, and Gender set to Female. As result we found 2 people, one 87 years old and one 88 and the relative graphs were successfully populated.

- **FR16**: When the client introduces a query from the dashboard page (figure 9) and the number of entries that fullfil the query are less than

1000, the system shall warn the client about the impossibility to show the results in page.
**Additional comments**: To test if the application respects the threshold value (that is not set to 1000 but only to 1), we decided to edit the Age filter value of the query used in the previous test, setting it to 88-92 instead of 86-92. When we tried to get result values an alert was displayed telling that our query was too specific (this because we assumed that threshold was set to 1).

- **FR18**: When the client introduces a codice fiscale from the dashboard page (figure 5), the user exists and the client have already obtained the permission of the user, the system shall return the data associated to the individual.
  **Additional comments**: To test this requirement, we navigated to the "Permission" page and obtained a user's codice fiscale for which we obtained permission. After that we've navigated to the search page and inserted the obtained codice fiscale. As result, the page successfully showed us the name, codice fiscale, gender, birthdate of the user and the graphs displaying heart rate and weight of last available data.

- **FR19**: When the client introduces a codice fiscale from the dashboard page (figure 5), the user exists and the client do not have the permission of the user, the system shall prompt the client to ask permission to the user.
  **Additional comments**: To test this requirement, we navigated to the "Permission" page and obtained a user's codice fiscale which request was in pending status. After that we've navigated to the search page and inserted the obtained codice fiscale. As result, the page successfully showed us an alert with the following text: "You do not have permission to access the user".

- **FR20**: When the client introduces a codice fiscale from the dashboard page (figure 5), and the user do not exists, the system shall prompt the client to ask permission to the user.
  **Additional comments**: To test this requirement, we navigated to the search page and inserted a fake codice fiscale. As result, the page successfully showed us an alert with the following text: "You do not have permission to access the user".

- **FR21**: When the client is requesting permission to a concrete user in page and clicks on Yes, the system shall emit a to the appropriate user application requesting their permission.
  **Additional comments**: To test this requirement, we registered a new user for testing and then navigated to the search page and inserted his codice fiscale. As result, the page successfully added in the request list the new codice fiscale and the corresponding user received a notification.

- **FR22**: When a user approves the request of access made by a client, the system shall store that permission
  **Additional comments**: To test this requirement, we used the test user registered for the previous test and accepted the request made. After that we turned back to the "Permission" page and seen that the status switched from pending to accepted

- **FR23**: The system shall show the client a list of all users that had given their permission of access in page in descending alphabetical order.
  **Additional comments**: To test this requirement, we used the test user registered for the previous tests and the requests made. Only the descending alphabetic order was not respected.

- **FR24**: When a message with a correct format reach the interface SI6 with an existing pair of username and password, the system shall replay with a token that will identify the client in the next api calls. The token have a validity of 3 days
  **Additional comments**: The login phase of the application ends successfully by authenticating the user and giving the valid token.

- **FR25**: When a message with a correct format reach the interface SI7 with a well form query and the result of the query have 1000 entries or more, the system shall replay with a data batch that complies the logical constraints expressed in the query
  **Additional comments**: This requirement has been tested with the Requirement n.15 and the displayed data is correct according with the filters.

- **FR26**: When a message with a correct format reach the interface SI7 with a well form query and the result of the query have less than 1000

entries, the system shall replay with a 403 error.
**Additional comments**: This requirement has been tested with the Requirement n.16 and we checked that the HTTP request give a 403 error code.

- **FR27**: When a message with a correct format reach the interface SI8 with a valid codice fiscale, the user exists and the client have already obtained the permission of the user, the system shall return the data associated to the individual.
  **Additional comments**: This requirement has been tested with the Requirement n.18.

## 3.2 Failed Tests

- **FR2**:When the welcome page is shown, the system shall show two buttons (figure 14). When clicked, one of them shall redirect to the log-in page and the other to the registration page.
  **Additional Comments**: On the web app there is no button to redirect to the registration page

- **FR3**:When the registration page is completed, the system shall show the terms and conditions page and only users that accept the terms and conditions will successfully registered.
  **Additional Comments** there is no request for acceptance of T and C

- **FR5**:If the user declines an Android Permission Request, the application shall issue again an Android Permission Request for the same sensor.
  **Additional Comments**: In Android once a request is denied it won't be possible to ask again for it

- **FR17**: When the system is showing a data batch in the dashboard that fulfils a query (figures individual search: 6, 7 and 8; figures group search: 10, 11 and 12) and new data that also fulfils the query arrives, the system shall update the view of the data without intervention of the client.
  **Additional comments**: Again with the same query used in Test (FR15) we tried to register with another device without refreshing the

dashboard a new person that matches with the applied filters (Female, 86 years old with weight set to 85 kg). As result, the page didn't display any changing until we manually refreshed it.

## 3.3 Pending Tests

- **FR4**: When the user logs in for the first time in the application, the application shall check what sensors are available an issue an Android Permission Request for each of them.
  **Additional Comments**: The test of this case couldn't be performed since we didn't have access to enough resources to test sensors

- **FR6-7**:The system shall poll the available sensors in the background at fixed time intervals and store the measures in the server.
  **Additional Comments**: Functions were not tested since in the ITD it was required that the application won't work in foreground

- **F11-14**(See RASD for more informations)
  **Additional Comments**: Requirements write about the back-end logic which cannot be tested

# 4 Additional Comments and Other Issues

## 4.1 Major Issues

While testing the app we found three major issues these are:

- **Android 9.0 (Pie) unsupported**: Android 9.0 is the latest version of android and there is no request for a permission to use an HTTP connection, this renders the application unusable
  Fix: once the app is opened if the API level detected is the same as android 9 or above there should be a request to access the HTTP protocol.
- **Missing Register Page**: On the web app there is no possibility for a Business to register with it's informations, we were given login instructions by the developers
- **No Password Encryption**: Password are kept in the database with no encryption this allows anyone with access to the database to read passwords sent by the users

## 4.2 Minor Issues

- **Problems with individual request**: if a request with an invalid CF is performed the list of available request is canceled from the web interface. Fix: Refresh the page
- **Missing Welcome Web Page**: once a web user logs in there is a blank page, interaction will begin after choosing an option from the side menu

## 4.3 Documents Quality

The documents that were given to us were well structured but there were many features that were reported both on RASD and DD that were not implemented or that weren't working correctly

## 4.4 Testing Quality

The informations about the testing phase were provided in the DD and they were extremely short, moreover we couldn't retrieve informations about the testing that was performed during the development. We assumed that testing was never performed