POLITECNICO
MILANO 1863

TrackMe
Software Engineering 2 Project
ATD Document

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Contents

1 Introduction

1.1 Purpose and Scope

The Acceptance Test Document has the purpose of evaluating the adherence of the implementation with respect to the documents previously delivered (RASD & DD).
To do so, we have considered the three documents available in the provided GitHub repository.

1.2 Reference

As said above, the three documents analysed are:

- RASD Document: Requirements Analysis and Specification Document;
  - v1.2 - 12/01/2019
- DD Document: Design Document;
  - v1.1 - 12/01/2019
- ITD Document: Implementation and Testing Document.
  - v1.0 - 13/01/2019

1.3 Overview

2 Project

2.1 Project info

3 Installation Setup

3.1 Backend

3.1.1 Installation and launch

We have installed the backend as explained in the ITD Document, with the only exception of the particular system-dependent command (we tested the project on macOS).
We installed the following module with *"brew"* command:

- **PostgreSQL**: an open source object-relational database system;
  - installed with the command: *brew install postgresql*
- **NodeJS**: an asynchronous event driven JavaScript runtime.
  - installed with the command: *brew install nodejs*

After the launch of the postgre service (with the command *brew services start postgresql*), we created a new database and a new role for the admin user. Then, with the new role just created, we imported the dump of the database provided in the Implementation folder of the previously mentioned repository. As last step we have configured the *"start.sh"* file with the following configuration and launched it with the command *"node app.js"*.

```
TEST_API="enabled"
DATABASE_URL="postgres://admin:password@localhost:5432/test"
JWT_SECRET="E9ql4cmZzDNG9qL8xh6F"
MAIL_PROVIDER="gmail"
MAIL_ADDR="mail@prova.it"
MAIL_PASSWD="pass"
LOCAL="enabled"
PORT=12345
HOST="localhost:${PORT}/v1"
MIN_USER_NUMBER=2
```

Figure 1: Errore in the database configuration

3.1.2 Conclusion

We didn't encounter particular issues, the guide lines are clear and enough explicative.
The only thing which makes sense to be mentioned is one error encountered during the database connection. It always responds with "*message: role //password// does not exist*". This is due to a small error in the configuration file, probably to the fact that is a machine dependant parameter (view image 1).

3.2 Frontend

3.2.1 Installation and launch

Regarding the mobile application we have installed the provided APK file on an Android Smartphone. We also tried to install it on a few simulators.
Regarding the web-app, we launched it using the command *"python3 -m http.server"*, as explained in the guidelines.

3.2.2 Conclusion

Following the instructions on the ITD Document, on a smartphone, everything works correctly. Doing the same steps on a simulator, the application crashes, probably due to some incompatibilities with the running version on the simulator.
The web-app launch works correctly.

4 Acceptance Test

4.1 Tests

We have tested the implementation of each requirements that has been implemented, according to ITD document provided.

4.1.1 Actor registration

- [RM_M]: *OK.* Users can register providing information required, but registration process succeed also without an associated smartwatch.
- [$R2_M$]: *OK.* Implementation works: registration process is successful if there is NOT another user with the same email/fiscal code. However, errors-handling is not able to distinguish between a duplicate email or a duplicate fiscal code.
- [$R11_M$]: *OK.* Organisers can successfully register.
- [$R1_W$]: *OK.* Companies can successfully register.
- [$R14_C$]: *OK.* Information such as birthday and fiscal code are validated through UI form.

4.2 Actor Authentication

- [$R1_M$]: *OK.* Users can successfully log into the application.
- [$R12_M$]: *OK.* Organisers can successfully log into the application.
- [$R2_W$]: *OK.* Companies can successfully log into the application.

4.3 Individuals Management

- [$R6_M$]: *OK.* Requests appear in the right section of the mobile app. Users can effectively accept or decline them.
- [$R2_C$]: *OK.* Users received notification about new requests at the email address provided during the registration phase.

4.4 Data management

- [$R4_C$]: *OK.* We can't directly test this feature, but it seems that all data loaded into the application is also available after a logout.
- [$R5_C$]: *OK.* Same as the previous one.
- [$R2_S$]: ??????

4.5 Query management

- [R6$_W$]: *UNKNOWN.* Check the "Issues" section.
- [R7$_W$]: *OK.* Companies can actually request data of individuals.
- [R8$_W$]: *OK.* Companies can access to individuals data through the web app.
- [R9$_W$]: *OK.* The web app actually provides the data download functionality.
- [R6$_C$]: *OK.*
- [R6bis$_W$]: *OK.* The web app implement the subscription functionality through a slider. The company actually receives a notification when new data is available.
- [R7$_C$]: *KO.* Check the "Issues" section.

4.5.1 Issues

Concerning the implementation of the requirement [R6$_W$], we were not able to check if the queries work because the system kept telling us that the parameters inserted were too restrictive.
During the testing of requirements [R7$_W$] and [R8$_W$], we have found the following issue:

- the process fails if requests are made by a company that has the same email address of a user.
  The error message is the following: *"Error: Unauthorised. Retry"* and it appears on the website as an alert. However, since it's unlikely that a company uses the same address of a user, we still marked the requirement as "OK".

4.6 Race management

- [R8$_M$]: *OK.* Registration is possible through the track4run tab at anytime.
- [R9$_M$]: *KO.* Check the "Issues" section.
- [R13$_M$]: *OK.* Organisers actually have all the necessary information to create a path.
- [R14$_M$]: *OK.*

4.6.1 Issues

Concerning requirement [R9$_M$], the application only displays the name of the run, its status and the position of participants. Information about the starting point, the ending point, the precise path and the run length are not available.

4.7 Users Spectating Race

- [R10$_M$]: *OK.* Participants position are correctly displayed.
- [R13$_C$]: ????????

4.8 Revision History

- 1.0.0 - Initial version (20/01/2019)

4.9 Document Structure

5 Effort spent

- Stefano Martina:
- Alessandro Nichelini:
- Francesco Peressini: