

GROUP assignment

Project team L3L1 : Abdel Massih Youstina, Thierno Bah, Mbaye Ndéye Pathé, Hamiche Mehdi

Writer of this assignment : Project Team

1) Context

1.1) Goals of the project

For this last semester, we have a project to do. My project is called "Kourte" and the objective of the project is to develop a smartphone application allowing the user to obtain a precise and sensitive route of his path. Each route must contain several information like the address, the duration of the path, the date, type of transport, and the distance. This application is useful for : companies to enable them to choose a soft route for fragile goods, frail people to allow them to choose an optimal itinerary that would adapt to their handicap, and children, to visualize in a playful way the movements of their routes.

Then, we must eventually create a website that allows to find all the old lines of the user. In this website, the user can find all the information about the lines (like the duration, the mode of transport, the starting point, the arrival point, the distance, the town), and he can also see a picture or a video (in real time of the draw) of a line

1.2) Problems to solve, resources available

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1.3) Time Frame, deadlines

The projects began at the beginning of January 2022. Pre-defenses take place during the week of 12/04/2022 to 16/04/2022. The deadline for submitting our android app is 05/16/2022 and the deadline to hand in all last documents is 19/04/20022.

1.4) Team members

The team is made up of 4 members who are: Abdel Massih Youstina, Bah Thierno, Mbaye Ndéye Pathé, Hamiche Mehdi

2) Planning

2.1) Assignments of roles to each team member

First, Mehdi taking care of the layout and completion of the documentation as well as working on some project tasks such as getting old at android studio, detecting sensors, creating pop-ups, or even creating layouts. Also, he did with Youstina the development plan (Gantt chart). Moreover,

Youstina did the models, has participated in the writing of all the documents that have been written until now (specifications, recipe book, detailed design, and test plan), she did the class diagram and the deployment diagram. As well, for the development phase, she did the main functionality (the sensitive route), she did four of our graphical user interfaces and she have tried to do the database.

Pathé participated in the definition of the needs and the choice of tools and software, but also in the elaboration of documents such as the test plan (unit tests, class diagrams), the specifications. During the development phase, she worked on the creation of the first version of the history page, and a little on the database.

Thierno participated in the drafting of documents, and he did the use case diagram. During the development phase, he participated to the creation of the database, the history page and the graphic layout

2.2) Work schedule

1. Course / Definition of objectives (25/01/22),
2. Needs analysis for our project (01/02/22),
3. Delivery of the specifications (08/02/22),
4. Delivery of the recipe book (15/02/2022),
5. Delivery of the detailed design (01/03/2022),
6. Development phase (01/03/2022 to 05/04/2022),
7. Integration phase (05/04/2022),
8. Pre-support and delivery of the project with the rest of the documents (12/04/2022 to 19/04/2022).

2.3) The evolution of work that we could imagine

For the Android app, we can imagine permitting to the user to send a picture of a sensitive route to their friends. We can also create a favorite to permit to the user to easily find

his favorite routes. And we could propose for the children, to change the color of the sensitive route.

2.4) The tools used to help with the organization

To help us, we used the Gantt chart to establish a development plan and distribute the tasks by pair.

2.5) Expected problems

In terms of problems, we must also consider that the development plan will not be fully respected due to the delay. As a result, the website will not be able to be done within the deadlines respected (optional)

3) Technical research

3.1) The technological tools that were chosen for the project

For our project we chose to work in computer that be able to program our application on Android Studio. And, to test the project, we must have a smartphone equipped with an Android operating system.

3.2) Any obstacles to overcome

First, there was a problem to testing the application for Mehdi because he doesn't have a smartphone equipped with an Android operating system. Moreover, at the beginning, Thierno didn't have a computer to work on the project. Furthermore, when we create a lot of Android Studio projects, the computer does not work properly

3.3) Programming languages that must be learnt

We used different programming languages. In fact, to develop our application, we had to learn how to use Android Studio. In the development environment, we used Java (object-oriented computer language allowing the design of powerful mobile applications thanks to multithreading), and XML (structure the data) for the graphical user interfaces.