PST3 REPORT

HELLO SIGNS

Written by Charles Carron-Cabaret, group E

Logo de la Langue des Signes Française (LSF)

<u>Figure 0: Hello Signs logo by Johan Hayoun / Hello signs team 2018</u>

Team members

Charles Carron-Cabaret

Johan Hayoun

Benoit Germain

Thomas Hua

Jimmy Nguyen

Project tutor

Eunice Martin

Table of contents

Introduction

Hello Signs is a mobile app to learn sign language on your phone. You will find quiz, lessons, a dictionary and a chat to talk with other users online. We are programming our app with the IDE (Integrate development environment) Android Studio using the Java programming language. With this project we want to develop new coding skills and discover how to build a mobile app.

The sign language is a not so popular in our daily life however in France only, 170 000 people are using it every day. This is the reason why this project exists, we want to make it more available for everyone by learning it in fun way.

Personal tasks

The main task of this project is programming and writing the code. As I said earlier, we are using Android Studio to write our code and to run the app by using an Android phone emulator. The code is divided in activities. Each activity represents a screen of the app such as the welcome screen, the dictionary or a navigation bar.

In the other hand, we need to write the content of the app (questions for the quiz, the lessons and the dictionary). This is also an important task. Indeed, without content and data our app cannot work.

Personally, I wrote some of the questions for the quiz. And yet, we have more than three hundred questions and answers. In addition, I started programming a simple mobile but what I really did is learning how to build an app. I worked on the login activity. This activity will allow user to create a profile and share it with other users.

Obviously, I wrote one of the parts of the report we needed to do for the first semester.
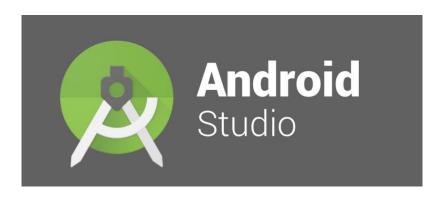

Figure 1: Android Studio logo / Android Studio / 2018

Problems encountered

Despite the project doing well, problems we had some difficulties. In fact, we did not know how to build an app before September 2018 therefore we started learning from the beginning.

One of the main problem was the data. Indeed, we needed content to make the app. We wanted images but none of us have enough drawing skills to make it. Although we had a lot of time to draw these image, we technically could not. Instead of doing it on our own, we contacted an author and asked the right to use his work. This author, **Laurent Verlaine** gave us a data base full of sign language images.

Figure 2: Laurent Verlaine self-portrait / Laurent Verlaine / 2015

This image is a drawing of **Laurent Verlaine**. We drew himself with his own drawing style. It is also the style of the images from the data base we are using for our app. Images are smooth, funny and colorfull. This is exactly what we was looking for. We are really thankfull to him because he lifted a weight from us. We are now able to build the app with a beautiful content.

Future applications

To finished to project the app needs to be done obviously. With everything on it, the chat, the quiz, the dictionary and the lessons. All of these must work together. We do have a deadline but if we cannot finish it on time, we will manage to do it after the end of the year. We care a lot about this project and would like to realize it entirely.

We still must write all the activities for the chat and the dictionary and to run all activities together. Our project chief will delegate tasks for the second semester, but we already have an idea of how we will organize ourselves.

Hello Signs will be free and available on every mobile app stores. We want to effect as many people as we can to make sign language popular. We do not have any budget constraints because everything we use is free (software, data base…) but we want to create an online community like a social network. For this reason, we might use servers to store all the data.
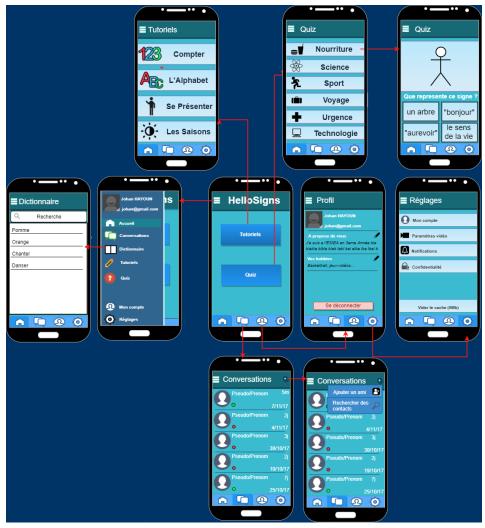
Figure 3: User manual / Johan Hayoun & Thomas Hua / Hello Signs Team / 2018

This picture is the user manual we made for our project. It help us to design the app and program it. It is a visual that shows the different activities we want to create. We used **Dram.io** to make it. As you can see, we designed ten activities. This is how the app should look like.

Key words

Mobile app

It is a computer program designed to run on a mobile device such as a phone, a table or a watch.

Activity

It is a crucial component of an Android app. The way activities are launched and put together is a fundamental part of the platform's application model.

Sign languages

They are languages that use manual communication to convey meaning. Each language had it own sign languages. For our app, we are using the French one.

Database

It is an organised collection of data.

Emulator

In computing, an emulator is hardware or software that enables one computer system to behave like another computer system. For our project, we are using a PC to emulate a mobile Android phone with Android Studio.

IDE

Integrate development environment is a software application that provides comprehensive facilities to computer programmers for software development.

Reference

Figure 0: Hello Signs logo by Johan Hayoun / Hello signs team 2018

First logo of our team. By Johan Hayoun from The **Hello Signs** Team.

Figure 1: Android Studio logo / Android Studio / 2018

This is the official Android Studio logo, the software we are using to build and run our app.

Figure 2: Laurent Verlaine self-portrait / Laurent Verlaine / 2015

Laurent Verlaine self-portrait. The images we are using follow this style.

Figure 3: User manual / Johan Hayoun & Thomas Hua / Hello Signs Team / 2018

The user manual is the future design of our app. Made by Johan and Thomas from the **Hello Signs** team.

Bibliography

www.developer.android.com