**HAPIS**

**Introduction:**

Homeless Aid Panoramic Interactive System (HAPIS) is introduced for a noble cause of helping the people in need. This task expects me to propose a suitable interactive front end and a supportive backend to develop an android app with the features specified in the template. HAPIS is supposed to be an interface between people who need help and the people who want to help. It also has the need to filter out people in terms of

1. their geographic location
2. the help they need(food, shelter, money)
3. who needs help the most

One can have 2 ways, either he wants to help, or he wants to be helped. HAPIS provides the database of the people in need which can be accessed by the people who want to help. One can choose to either stay anonymous or help others in person. Their geographical location can be accessed and with a Liquid Galaxy setup, one can also look at it directly.

For those people who need help, they have to fill out a questionnaire that is going to ask their financial status, place of living, their lifestyle, etc. The app then decides whether the person needs help or not. If yes, their details are stored in the database for people to view. Thus there needs to be a separate frontend and backend system going on for this, one which is going to deal with User Interaction and the other for handling database.

For developing such an application with interactive Graphical User Interface, I strongly suggest the use of Java as the frontend programming language. Java, as we all know is a very powerful tool that has great features like being able to work on Object Oriented Programming Paradigm and also supports web programming. Though it is considered as a General Purpose Programming Language it also runs on various platforms and has compatibility with Android also. It also has powerful IDEs that help us keep our codes error-free and easy.

Java is a user-friendly app developing programming language. C++, though highly efficient, is a Command User Interface. Also keeping in mind about the user interaction that HAPIS requires, Java seems to be the most suitable for this purpose. Extensions and any modifications needed in the application after its development can also be easily done with Java. Since people of different sectors will be using this app, we need a simple yet interactive and powerful user-friendly app needed for Java.

It is more than 20 years old, but the main reason I chose Java over Python is because of the global usage of Java and its versatility.

Netbeans is an open source IDE that works with Java. Even novice programmers can easily develop interactive apps using this IDE.

Java goes well with SQL. Since we all know the advantage of using open source products, we can choose to have MySQL and Java which both go hand in hand in developing this application. We have already been grouped as a strong student community volunteering and contributing with their fullest potential for projects involving social concerns. Even in this HAPIS project where lot of new ideas are expected, the main power comes from the student community. Already Liquid Galaxy is doing a noble job of integrating the future to work towards an open source world. Now with an app to take care of this, the global community is even more accessible to all. Hope the good work persists.

CHEERS!