Distributed and Mobile Computing

Mobile Application Development

The goal of the project is to create a mobile application with the help of the Ionic framework. This project can be done in groups of two.

1 Project description

A shopping mall asked you to develop a mobile application to help the shop owners to give discount vouchers. Two kinds of people will use your application :

- shop owners : they can signup and offer discount vouchers to a marketplace. These vouchers can be limited in quantity or have a limited duration.

- clients : they can signup, go to the marketplace and get some discount vouchers. They also have access to a dedicated marketplace where they can exchange theirs vouchers.

2 Requirements

2.1 Global

1. Users can sign up as a client or a shop owner. The required fields are a username and a password. Two users cannot have the same username.

2. Users can log in using their own credentials.

3. Users can log out of the application.

4. Users can delete their account.

5. All users can go to the main marketplace and see available discount vouchers.

2.2 Shop owners

1. Shop owners have the possibility to add a discount voucher to the marketplace. A discount voucher should contain these information :

    - name of the shop where the voucher is available
    - amount of the reduction
    - a time duration (e.g. 24h) or a quantity (e.g. only 20 vouchers are available for clients)

2. Shop owners can delete one of the voucher they created.

2.3 Clients

1. Clients can go to the marketplace and select vouchers. Once they have selected a voucher, there is a validation step to confirm that the user want this voucher.

2. Clients have access to a page where they can see all the vouchers they have. The deletion of one voucher (e.g. when they use it or when they don't want it anymore) is not required.

3. Clients cannot take more than 1 voucher from an offer (otherwise, some clients would take all the 20 vouchers from a shop owner).

4. Clients have access to another marketplace to exchange vouchers where :

    - they can post the type of coupon they have (shop name and amount)
    - they can post the type of coupon they want (shop name)
    - they can see other people offers
    - on each offer, there is a "Request" button. If they press this button, a request will be send to the original poster of the offer, and if he/she accepts, the exchange is done. Then, a notification is sent to both person.

3 Project Delivery

Due date: February 14 2017 11:59PM
For this project, you'll have to send a .zip or .tar.gz archive which contains :

- your cordova/ionic config files

- your npm required dependencies

- your application source code (HTML/CSS/JS)

- a executable bash script `start.sh` that downloads dependencies and runs your application. If your application requires an additionnal server (node or something else), the bash script must also runs this server

- a README to describe briefly your application

Your archive needs to be named

- JohnDoe–JaneRoe.tar.gz

- or JohnDoe–JaneRoe.zip

(full name of the 2 people separated with a dash –, camelCase)

Please send you project as an email attachment to :

- `julien.tissier@univ-st-etienne.fr`

- `damien.reimert@inria.fr`

with the subject "Projet Application Mobile".

4 Project display

Date of submission: February 15 2017 01:30PM-4:30PM
Each group will make a presentation of 10 min, including questions of their realization. The group will present its realization, the technical choices, the technologies used...