

ESS – Web Engineering 18/19

Mestrado Integrado Engenharia Informática
Mestrado Engenharia Informática

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Assignment - Betting House Web App

This work extends the assignment from the Software Architectures course from the previous semester. Indeed, the functional requirements to fulfil for WE are the same as for SWArch.

In addition, the web app must consider at least 3 users' profiles:

- admin: profile responsible for managing the information in the app such as the users, bets, etc.
- admin users shall have access to an admin interface or independent app that can be used to manage bets creation update and closure.
- premium users: this kind of users pays a fee which gives them access to extra information about events, restricted events just for these kind of users, etc.
- regular users: this profile represents the remaining regular app users.

You should also enforce the following non-functional requirements:

- Real-time responsiveness: the application deals with bets on games and it should guarantee that new bets are not possible after the end of the game.
- Scalability: the application is supposed to get a tremendous amount of requests in certain games (e.g. super bowl, European Champions League) and it should respond smoothly.
- Interface: it should follow at least level A of the Web Content Accessibility Guidelines (WCAG).

Part I

The first part of this assignment is composed of the definition of the interaction of the users with the application. This specification should be done using the language IFML and the corresponding WebRatio tool.

Deliverables (git tag “part1”):

1. WebRatio project, including domain/data model and site views.

2. Report explaining the model.

Deadline: April 4th, 2019

Part II

For the second part of the assignment, you should develop a browser client and server based on the specification of Part I.

Note you can choose any technology of your choice. However, the choices must be justified (e.g. open source, community, maintainability, libraries, etc.).

The client should be responsive, reactive, accessible and easy to use. The application should also be secure. All these attributes will be part of the evaluation.

Deliverables (git tag “part2”):

1. Browser client code.
2. Server code.
3. Report.

Deadline: May 30th, 2019

Groups

Each group should have 2 students which can be the same from the previous semester. If you did the previous work alone, find a colleague. If you cannot find a colleague, please join an existing group of 2. However, groups can never have more than 3 students.

After the group formation, you should create a git repository (e.g. github, bitbucket, gitlab) and invite the teaching team to be part of the project.

Deadline: March 8th, 2019

Notes

1. This assignment is in its version 1 from February 28th, 2019.
2. This assignment is on purpose written to be vague. In your current academic situation you should be able to understand and eventually wide the requirements of an assignment. When in doubt, please discuss with the teaching team.