uc3m Universidad Carlos III de Madrid

Programming Financial Mobile Applications

Academic Year: (2023 / 2024) Review date: 09-06-2021

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: ZARRAONANDIA AYO, TELMO AGUSTIN

Type: Electives ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

It is recomended to have previous knowledge on Javascript, HTML and CSS.

OBJECTIVES

Learng to develop multidevices applications using ANGULAR

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Introduction to Web Components.
- 2. Introduction to Angular 11 and comparative of Angular vs REACT, VUE and others
- 3. Enhcanced Style Sheetts (SCSS).
- 4. Templates and directives for binding model and view.
- Model implementation (TypeScript).
- 6. SPA applications. Advance routing. Implementing services.
- 7. Web Responsive and Web Responsive Mobil First. Layout with CSS GRID, Flex and alternatives.
- 7. Design of basic interface: Angular Material (UI) and other component libraries.
- 8. Asynchronous Angular: Observables and Promises. Timers.
- 9. HttpClient. Using REST services: (financial APIs and/or opendata).
- 10. Using databses in cloud (Firebase) and LocalStorage.
- 11. Optimizations and advance deployment.
- 12. Using multimedia sensors: GPS, VIDEO and CAMERA.
- 13. Usability, Accesibility and legal regulations

LEARNING ACTIVITIES AND METHODOLOGY

- * Theoretical lectures
- * Practical lectures
- * Continous assessment exercises
- * Practice projects
- * Tutorships: Teacher assistance
- * Exercises and examination

ASSESSMENT SYSTEM

Continous assesment:

- 50%: 4 microprojects in groups.
- 50%: individual project: fintech app. 40% application + 10% document

If the student follow the continuous assesment there will be no final exam.

For those who does not follow the continuous assesment here will be a final exam with open questions.

% end-of-term-examination:

% of continuous assessment (assignments, laboratory, practicals...): 100