

COMP3613: SOFTWARE ENGINEERING II

Project Specifications

PROJECT

- Will write working software
 - Does not need to be full application but needs to be fully functional with respect to the requirements tackled
- Much your time is going to be involved in the iterative software design process:
 - Specification, Design, Implementation, Testing
 - Concerned with your understanding of the main SE processes:
 - Specification, Development, Maintenance, and Evolution
 - Concerned about quality of software from an engineering standpoint:
 - Maintainable, Dependable, Efficient, and Acceptable

PROJECT

- Care more about quality of software
 - Code quality is not important
 - More about good engineering than good “programming”
- Lion's share of marks will go towards:
 - Specification
 - Design
 - Validation and Verification
 - Project Management and Team work

PROJECT

- Form a group of 3 to 5 people
- You need to generate your own description of your software
- First two weeks: initial specification, system design, and system architecture
 - Need to demonstrate how you capture and validate requirements
 - Need to demonstrate how you refine these requirements as time goes along
 - Assign one member to be the product owner for the entire duration of the project
 - Should be member with most domain knowledge of area
- Must do two sprints where you **start** implementation of system
 - Each sprint should yield working increment
 - Designate a team member as SCRUM master per sprint (not product owner :- ()

WHAT CAN YOU BUILD

- Software that solves a business or social problem
- You can use any language or framework you want once you can unit test
- Must use some form of version control (Github or Bitbucket preferred)
 - Add InzamamRahaman as a collaborator
- Encouraged to use PaaS , or IaaS
 - Azure, Google Cloud (free tier)

MILESTONE I

- Due: Wednesday 25th September 2019
- Deliverables
 - Group Name
 - Group Members
 - Agreement from the members of how you plan to work together, product owner, SCRUM masters, etc....
- Will post Google Form for you to entire data

MILESTONE II

- Due: Wednesday 2nd October 2019
- Almost completed specification
- User requirements and System requirements
- Should use UML diagrams where suitable

MARK BREAKDOWN

- Group Report (30%)
 - Document should demo increment approach
 - Specification, design, architecture, implementation description, risks, etc...
- An individual journal (20%)
 - Wordpress, Google Doc, Github hosted markdown, etc....
 - Log activities, lessons learned, hours worked, task accomplished
 - Experiences (good and bad)
 - What you contributed to project
 - Will post Google Form to capture links to docs

MARK BREAKDOWN

- Two presentations (25%)
 - Video detailing solution
 - In-person presentation
 - Plenary style
 - Suggest: Even a Geek can Speak

MILESTONE III

- Wednesday 13th October 2019
 - Architecture
 - Design
 - Code can help drive design
 - Proof of methodology and individual reports
 - Implementation up to this point

MILESTONE IV

- Thursday 5th November 2019
 - Run at least four sprints
 - Alternate between SCRUM masters
 - Care about testing, documentation, requirements tracing, good SWE practices
 - Version Control, Testing, CI

MILESTONE V

- Wednesday 27th November 2019
 - Group presentations
- Friday 29th November 2019
 - Delivery of final report and video presentation

