

# Software Engineering Workshop

3

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# Overview

- Same principles of previous workshops
  - Independent group work
  - Communication-intensive
  - Some degrees of freedom
- Some differences
  - Greater emphasis on implementation and testing
  - More mentoring and technical support
  - Learning a new domain
  - Opportunities for inter-team software integration

# Organisation

- LIC + tutors will mentor teams with 5 members (variations possible)
- Industry talks
- Mentoring will take place on-line
- Preliminary timetable will be published this week

# Assessment

- D1(10%) – Github set up, Project management plan and initial API design (10%)
- D2(20%) - API implementation and specification in swagger (10%), API design and test documentation (10%)
- D3(20%) - Platform prototype demonstration (20%)
- D4(50%) - Final demonstration (30%), Final GitHub repository (5%), Final report (15%)

# Assessment method

- Qualitative / comparative method
- Initial marks will be determined according to the quality of the work (A,B,C,D,E)
- Final marks will be determined according to a ranking of the teams within each category
- Multiple markers used for large components

# Schedule

- Week 1 (Monday 15 Feb 4-6pm. Online): Introductory lecture. Group Formation.
- Week 1 (Friday 19 Feb 4-6pm. Online): Guest lectures. Finalising Groups.
- Week 2 (Monday 22 Feb 4-6pm. Online): Lectures (TBC)
- Week 2 Friday 26 Feb 4-6pm. Online): Lectures (TBC)
- Week 2: Mentoring (Online).
- Week 3: Mentoring (Online). D1 due.
- Week 4: Mentoring (Online).
- Week 5 (Monday 15 March 4-6pm. Online: Extra lectures TBC.
- Week 5 (Friday 19 March 4-6pm): Extra lectures TBC. API URL due.
- Week 5: Mentoring (Online) D2 API implementation and documentation due.
- Week 6: No Mentoring.
- Week 7: Mentoring (Online).
- Week 8: First presentations D3 (Online)
- Week 9: Mentoring (Online).
- Week 10: Final demonstrations (Online). D4 due.
- Week11: Prize presentations for Optiver (selected teams only)

# Project activities

- Project will use data from different sources
  - Public health web sites
  - News
  - Social network data
- Building APIs
  - Each team will choose different data source(s)
  - First version of API expected in Week 5
  - Early delivery/frequent iterations encouraged
- Building a Web application
  - Adapted to needs of users
  - Uses APIs (own and other teams)

# Note on specs

- A spec
  - Will be incomplete
  - May contain inconsistencies/errors
  - May need clarifications
- Role of teams
  - Business analysis is an important part of this workshop
  - Study specs and raise issues
  - Use email or ask during mentoring
  - Specs will be regularly updated

# Use GitHub to manage your project, documentation and submission

- All teams should use Git to manage their project code base and deliverables (Github or other).
- Make sure your GitHub repo is shared with your **mentor** and course **admin** (*Git id: chitizadeharmin*)
- Other types of repositories can be used in agreement with your mentor
- If needed, read introduction to GitHub:  
(see WebCMS material, Lecture 1)

# Expected Git repository structure

```
-SENG3011_<TeamName>  
  |----README.md  
  |----PHASE_1  
    |--API_SourceCode  
    |--API_Documentation  
    |--TestScripts  
  |----PHASE_2  
    |--Application_SourceCode  
    |--Application_Documentation  
  |----Reports  
    |-Management Information  
    |-Design Details  
    |-Testing Documentation  
    |-Final Report
```

# Actions before 2<sup>nd</sup> lecture Week 1

- Form and register teams on course WebCMS course site
- There are two forms
  - Specify a team and timetable constraints
  - You are a member in need of a team
- When allocated to a mentor you will get
  - A weekly mentoring slot
  - A spec