SER 517

Software Factory Capstone

Spring 2024

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Agenda

- Expectations

- First Sponsor Contact

- Mandatory Tools

- In-Class Project Bidding

Expectations

Graded Items

Items	Hints	Group	Individual
Proper application of SE Design Process, consistent workload, code (quality) / research activity		X	X
Midterm: Project Plan	Template on Canvas	X	
Meetings with sponsor	• Once per 2 weeks • Meeting Minutes	X	
Final deliverable at end of semester		X	
Final presentation at end of semester		X	X
Presentation on Polytechnic Innovation Showcase	• Poster • Business attire	X	X

Meeting Minutes

- Who is present in the meeting / what is your group number?

- When did the meeting start / what was the duration?

- Which specific things were presented by the group?

- Which topics were talked about?

- What specific milestones / deliverables / requirements / actions were agreed upon?

- Which new requirements were added?

- When will the next meeting(s) be?

  ➡Document everything important that was talked about

Meeting Minutes

- If no meeting was conducted during a whole month (**only allowed if sponsor canceled meeting**):
  - Create a document stating that you had no meeting during this month
  - Provide proof that sponsor canceled this months meeting and could not rescheduled
  - State the date of the next meeting
  - **<u>Submit this document instead</u>**
    - <u>No submission for a month will lead to 0 points!</u>
    - Submit either the Meeting Minutes or the document described above

Meeting Minutes

- There will be a submission link on Canvas for each month
- Submit <u>one</u> pdf file that contains all Meeting Minutes of that month

Scrum

- Lightweight Framework for managing projects

  - Roles

    1. Product Owner: Your Sponsor

    2. Scrum Master: One of you for every Sprint

    3. Development Team: All of you

Scrum Process

- Product Backlog (derived from meeting minutes)
- Sprints (deployable/presentable increment)
  - Sprint Planning (Goals): Tied up to sponsor's requirements (traceable via meeting minutes)
  - User Stories
    - As per format: As a < type of user >, I want < some goal > so that < some reason >.
    - Multiple tasks can fall under a User Story
  - Tasks
    - Properly scoped for the Sprint should not be carried over without good reason
    - Assigned to one (!) person in the team who is solely responsible for it
    - Each task must be tested before setting status to "done"

Scrum Execution

- Sprint Planning (before starting the next Sprint)
  - Select US that will be finished within next Sprint
  - Define tasks for each US on Scrum board
- Sprint Review (after finishing a Sprint)
  - Show the customer/sponsor new features from last sprint
- Sprint Retrospective (after finishing a Sprint)
  - What was planned
  - What got accomplished
  - What didn't get accomplished
  - What could be improved / insights learned

Scrum Execution

- Standups (recommended, optional)

  - What was done since last Standup?

  - What do you want get done until next Standup?

  - Any impediments?

- Standups shouldn't be longer than ~15 minutes

Scrum Process

- Tasks (added before sprint, appropriate scope, description, assigned appropriately, belongs to a user story, …)

- User Stories (follows format, added to Sprint before start, no US added/ removed during Sprint, …)

  - US points should be assigned by using Planning Poker or similar

- Activity (one task should be in progress, status correctly updated, status updated through out the sprint, not only activity before sprint end)

- Sprint Retrospective & Goal documents must exist for each Sprint (on Google Drive)

Code Repository

- Git: Version Control

- GitHub: Service that provides a server for repositories

  - Add SER517asusprint2020@gmail.com

- Repository for **code**

  - Do not zip code

  - Not meant for other documents

- Commit code that YOU created

Code Repository

- Branching

    - Often several branches exist:

        - Master branch - working version of the software with features of every finished sprint

        - Development branch - development is done here during the current Sprint

        - User Story branches - optionally you can create branches for each User Story that is currently worked on

    - Merge branches after development is finished

    - Merge development branch into master after each Sprint for Sprint Review

Research Document

- Any work that does not yield code must be documented

  - This is proof for the work you have done

  - Helps other team members to quickly catch up in that topic

- This document must be created and maintained on Google Drive

Log File

- Create a log file (Google Doc template provided)

  - Enter: Date, time, duration, task you were working on (elaborate on the task; 1-2 sentences description; include task id), reference research document (if applicable)

- This log file must be created on the Google Drive

Expected Work

- Expected: **15-20 hours work per week**

- Consistent and significant commits on GitHub throughout the Sprint

- Activity (commits, document changes, log file, no gaps longer than 3 days)

- Commit messages and research documents contain task id from Scrum board

- Edit access given to documents / log file

- Code merged to master branch at end of each Sprint

Mandatory Tools

Mandatory Tools

- Mandatory:

  - GoogleDocs

    - For log file and research documents (and other files if needed)

  - GitHub

    - You are only allowed to use 1 repository

    - You have to **justify per email** to the instructor why you need more than 1 repository

  - For Agile/Scrum: Taiga - taiga.io

First Sponsor Contact

Sponsor First Contact

- Prepare:

  - Create an initial pitch/plan on how to tackle this project

  - Agree on a Software Engineering Process you will be using

  - (Optional) Decide on roles for each group member

Contact the sponsor

- Tag the email subject with project name

- Complete list of names and ASU email addresses of all group members

- (Optional, depending on project) Skype ID(s) etc. to communicate with sponsor (meetings via video)

- Include your initial pitch/plan

- Mention the SE Process you would prefer to use

- Ask for/propose a time for the first meeting

ToDo

- Invitations needed:
  - Your Scrum board (taiga.io)
  - Your code repo (GitHub)
  - Shared drive for documents (e.g. Google Drive)

- Invite the following accounts:
  - ser517grader@gmail.com

  (Taiga & Google Drive) (GitHub)