Emne:	IDATx1005 Systemutvikling Project description		
Klasse	BIDATA / BDIGSEC	Kategori:	Prosjekt
Faglærere:	Surya Kathayat (TRD) Ali Norozi (TRD) Grethe Sandstrak (TRD) Tom Røise (Gjøvik) Anniken Karlsen (Ålesund)		
Kickoff/førprosjekt:	Week 1 - 3		
Første iterasjon:	Week 4 - 6		
Andre iterasjon:	Week 7 - 11		
Tredje iterasjon:	Week 12 – 17		
Innleveringsfrist	To be submitted in Inspera (26.04.2024 kl 12:00)		
Presentasjon:	Uke 18, 2024 (Se Blackboard room for details)		

Project description

The team's task is to develop a tool for private households, student collectives, health institutions or similar places for planning of purchases. The application must provide an overview of food inventory, have a cookbook with recipes and generate a shopping list based on the selected recipe in the cookbook as well as the current inventory.

Each team is responsible for contacting and entering into an agreement with a person who can take the role and responsibility of end-user and customer (product owner).

The requirement specification described above is not final. Functionalities can be added and prioritized in dialogue with the customer and through feedback from user tests along the way.

Technical requirements

1. The application should be an Java/JavaScript desktop/web application.
    a. Java desktop application for BDATA students. Use of Scene builders is allowed.
    b. JavaScript based web application for BDIGSEC students
2. Application data should be persisted into a relational database or a file system.
3. Any usage of AI tools should be justified and documented both in Source code (with comments) and in report. Specifically it must be described which AI tools are used, what they are used for, and why.

Process

The project should be carried out in 3 iterations. The results of the first two iterations are presented in team meetings with subject teachers/learning assistants, while the results of the last iteration are presented to subject teachers at the end of the semester as part of the assessment in the subject. Overview of the three iterations:

- The first iteration has a focus on vision and requirements. The team will develop an early prototype using wireframe. User testing of the prototype must be carried out by users who are not part of the team. The prototype is presented at the first guidance meeting with the subject teacher/learning assistant, in addition to the use-case diagram and domain model.
- The second iteration focuses on developing an MVP (Minimum Viable Product) using Java. MVP means that the application has just enough functionality needed to use it. The application should at this stage be relatively error-free in contrast to the prototype. Carry out user test 2 on MVP and present it at guidance meeting 2 with subject teacher/learning assistant. In addition, you must present the first version of requirements documentation and WIKI
- The third and final iteration focuses on finalizing the application according to the customer's and team's priorities. Furthermore, all documentation, including attachments, must also be completed.

Note: The team should have a standup meeting as agreed by the team! They also should have a status update (and feedback) meeting with a student assistant once a week.

Basic information about the project

Your team is employed by a computer consulting company that has been commissioned to develop the new information system. Notice that the team must create its own full-fledged system. As a student, you will mainly play the role of a systems consultant designing and implementing the system. Lecturer plays the role as a mentor in addition to expert advisors.

- Each team member has approx. 80 hours for her/his disposal +/ - 10 %.
- In the milestone plan, you will find deadlines for compulsory deliveries in different iterations.
- To ensure the quality of the application the team must continuously undertake unit testing using JUnit.
- To ensure high usability and a good user experience the application must relate to Don Norman's principles of interaction design
- In order to evaluate the user experience the team must carry out usability tests after the first and second iteration (wireframe and MVP)
- Universal Design – the application must be designed according to WCAG 2.1 principle 1 - Perceivable

Resources

You will find project resources, including document templates, in the project folder on Blackboard.

Use of collaboration tools

The team will use collaboration tools as part of the project, such as Gitlab (https://gitlab.stud.idi.ntnu.no/users/sign_in), Gitlab Wiki, Gitlab Issueboards, Gitlab Pages, Figma, Google Drive etc. Experiences with the use of these tools must be summarized in the main report.

Note!

- Name the team gitlab project according to the following format: **idatx1005_2024_gruppenr**
- Add subject teachers from your campus to the Gitlab repo as **Reporter**.
- Include full names of team members on WIKI landing page in gitlab

Submission of report

Each team must deliver a separate main report as well as attachments according to the provided templates.

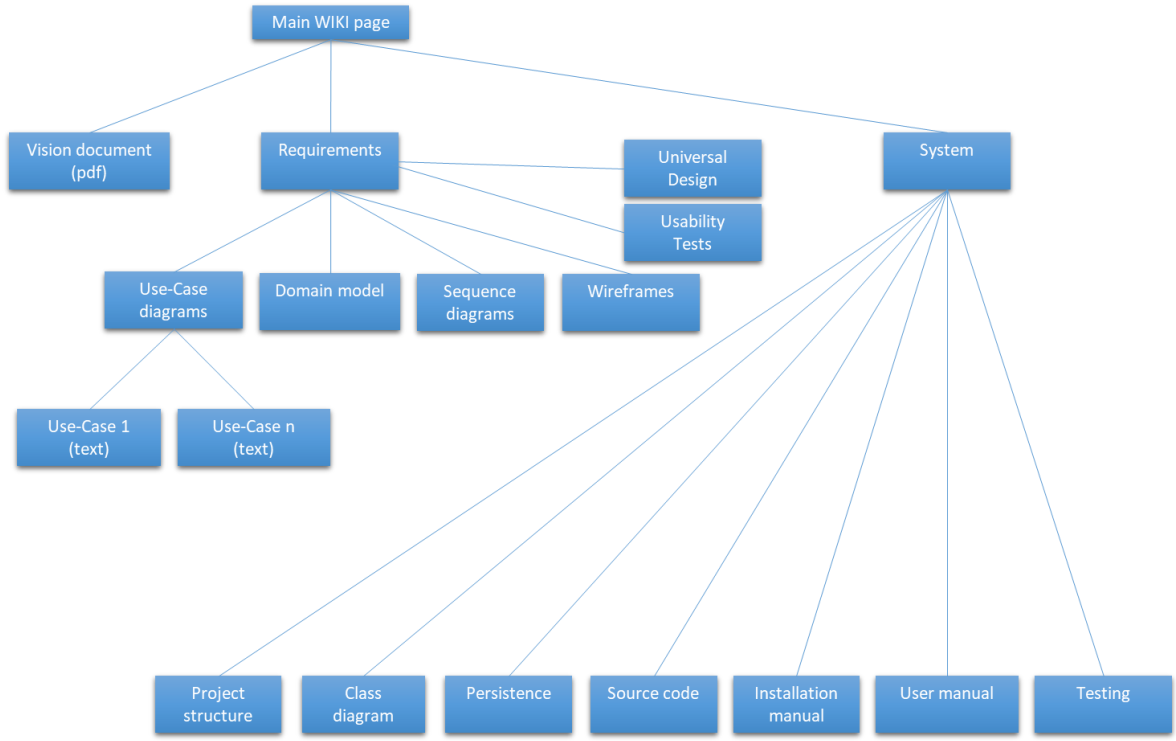
The team must summarize experiences dealing with the project-work and cooperation within the team and with their product owner if applicable. Each team member must also document and evaluate his/her own performance.

Attachments to the Main report:

1. Project Manual

a. Collaboration agreement
b. Project plan with the schedule in the form of a Gantt chart
c. Timesheets with status reports for each team member
d. Meeting invitations and minutes
e. Gitlab issueboard, screenshots from each iteration

2. Vision document
3. Link to GitLab WIKI pages with the following content (NB! See lecture on documentation for a more specific description of each content element):



4. Link to JavaDoc on GitLab Pages

Final team deliverable

Inspera submissions should include:

1. Final report (pdf-file named idata1005_2024_Report_groupno.pdf)
2. Project manual, vision document, gitlab issuebord and WIKI pages (all appendix's included into one single pdf named idata1005_2024_appendix_groupno.pdf)
3. Source code + javadoc (zip file named idata1005_2024_code_groupno.zip)
4. URL – GitLab repository

Final individual deliverable

A self-reflection report prepared individually and uploaded on blackboard in which you reflect on your contribution to the group, what you think went well and not well from your side and how the team functioned.

- Your name and Team number.

- Describe the team-process as you perceive it (what went well or not)
- Describe your contribution and role in this project
- Analyze your teams process and your own contribution and role (why do you think the team process became as you describe it?)
- Looking forward - if you find yourself in a similar situation - based on the experiences from this project how would you act? Experience gained in this project: will it impact your further studies?
- Conclusion - What have you learned (learning outcomes), are there elements from this project you would want to explore even further. Your overall opinion of the team, process and project.