

CIS 4250 – Software Design V
Instructor: Prof. S. Scott
Individual Accountability Report (IAR) Template

Note. Refer to the Project Manual for detailed instructions for IAR submissions.

Individual Accountability Report (IAR) Template

The following questions **MUST** be included and answered completely for each submitted IAR.

IAR must be submitted one of the following file formats: text or PDF.

Q1. Student Name: Adhyayan Bhandari

Q2. Student ID: 1135943

Q3. Associated Team Deliverable: Sprint 0 – Initial System Design and Backlog

Q4. Team #: 6 (Section 2)

Q5. What were the main technical or methodological knowledge, skills and/or abilities (KSAs) that were required to complete this team deliverable? What prior courses or experiences (e.g. co-op, group project, etc.) from your Software Engineering degree did you draw on for these KSAs? (bulleted list is preferred):

- UML Class Diagrams – Knowledge of how to create and structure class diagrams. Particularly which tool to use(PlantUML). Previous experiences using PlantUML to create class diagrams were during Software Design 4 as well as Software Engineering courses(3750).
- System Design Evaluation – Knowledge of full stack applications, deeply understanding how system interactions work between client, middleware and server. Previous experiences during CIS*3760 where full stack domain knowledge was built.
- Front-End React Knowledge – Understanding the structure of a react project. Concepts such as components, hooks, states. Already had prior knowledge of this since I worked with React during my last work term(WT5).
- User stories – Had written user stories in prior software design courses, so understood format/flow.

Q6. What was your existing level of experience with these topics/skills before your team began working on this deliverable? (1-2 sentences):

I had an intermediate understanding of UML class diagrams, writing user stories, full stack framework/MVC architecture, using PlantUML as well as React.

Q7. Comment on your individual KSAs learning during this deliverable, and what additional learning may be needed to understand or be more competent with these topics / tasks in the future?

- I need to become more familiar with internal workings of MongoDB since it's being utilized in the backend. I haven't worked with NoSQL databases, so I will be researching and trying to develop an understanding of the core concepts as it relates to the project.
- I needed a quick refresh of knowledge regarding class diagram conventions, such as ensuring that I knew the appropriate way to model aggregation/composition. Also needed a refresher on user story format to ensure it was aligned with expectations. I used a combination of the course textbook, slides as well as the PlantUML documentation to get back up to speed.

Q8. What specific contributions did you make to this team deliverable? This should include technical or project management contributions.

- Completed the Front-End class diagram using PlantUML.
- Input/Additional formatting of Back-End class diagram using PlantUML
- Contributed to discussion of all user stories.
- Created the technical inefficiencies section in Analysis.
- Reformatted justification for tech stories to emphasize overall impact.
- Added the justification for user stories 1-10

Q9. With whom did you collaborate for any of the above contributions (be specific – saying “all team members” is not sufficient. State which parts you worked on with whom)?

- Naza - Discussed the Back-End class diagram Design + Formatting Changes. Naza took lead on the back end model design, I provided guidance on some aspects of the modelling like organizing the sections of the backend and emphasizing the connections between react hooks and the “middleware” component and the db. This was needed in order to ensure that the backend and frontend were aligned.
- Jake, Naza, Ike, Dawoud – Discussion of user stories was with the entire team. As feature ideas were discussed, different individuals took lead to write and format stories. I wrote 3 user stories in total based on our list of features.
- Remaining tasks were independent.

Q10. Comment on how well you managed your time over the time period allocated in the Course timetable to this team deliverable (i.e. the time between the prior team deliverable to this team deliverable).

Time was managed well this milestone. Since the group split tasks right at the beginning of this sprint, it gave me adequate time to perform my necessary tasks. A lot of the time during the meetings was spent performing discussions and sketching out rough ideas, and this allowed us to do the necessary formatting and further refinements individually. There wasn't too much external research required to complete these deliverables, majority of the research was looking over the course textbook and other online sources to confirm format and conventions of user/tech stories and class diagrams. During the final day we were slightly rushed since everyone added their respective components to the final document and we needed spend time to ensure the deliverable was appropriately formatted.