Individual Accountability Report (IAR)

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: Tony Ngo

Q2. Student ID: 1142414

Q3. Associated Team Deliverable: Sprint 3 (2 week sprint)

Q4. Section #2, Team #: 8

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):

KSAs (knowledge, skills and abilities):

- Communication and collaboration skills to split tasks up and to brainstorm child tasks
- Knowledge of TypeScript and Javascript was required
- AI and back-end engineering experience
- Working in large codebases (specifically, tracing files to understand where local data is stored and can be fetched)
- Version control
- Agile experience to meet deadlines appropriately

Prior Courses & Experience:

- Co-op experience with full-stack and front-end development in Vue and React, which provide relevant and similar skills for Typescript
- Co-op experience with back-end and AI engineering skills, with hands-on experience using models and AI endpoints
- Co-op experience with prompt engineering
- Experience from personal projects using Typescript, Node.js and other relevant frameworks and languages
- Co-op and school experience (from previous courses) in Agile

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

I have strong experience in back-end development and AI engineering, having built multiple

products before in my co-ops using various languages and AI models. I have used Typescript in personal projects previously which helped with my implementation during research and experimentation. I also had experience building full-stack applications and UI from previous co-op work terms. Given my experience in these areas, I felt confident while working on this deliverable.

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?

In this deliverable, I learned most about Typescript and front-end development. With a lack of expertise in front-end and styling, I learned a lot about these areas in this deliverable, working on the AI chat user interface, making it functional, clean, and reactive. I also created recommendation buttons, which required some problem solving so that events can be handled accordingly.

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

- Built AI chat bot user interface for conversation-like view
- Added different recommendation questions as buttons
- Added styling to AI chat page
- Added system prompt to better tailor the AI chat bot for financial advice
- Added conversation history retention so that AI chats have better context and can better answer the user's questions
- Added reactivity such as the "Budget AI is thinking…" component
- Code reviews on merge requests
- Helped maintain version control for the sprint branch and ensuring no conflicts

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)?

- I collaborated with Andrew on the Budget AI chat bot page.

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).

Over the allotted time period, I believe that I managed my time very well. In the initial stages of the sprint, I focused on brainstorming and planning our chat-bot's UI and page layout. Over the first weekend, I focused on implementing the changes required for a conversation to be displayed. Afterwards, changes were made such as the recommendation questions, system prompt engineering, and conversation history retention. Overall, the majority of the changes for this deliverable were completed over 1 to 1.5 weeks into the sprint, allowing us to close out the task early.