CIS 4250 – Software Design V
Instructor: Prof. S. Scott
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 2 (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 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.

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 implementing AI models and endpoints into Typescript. Prior to this sprint, I primarily had my KSAs with AI in Python, so there was some learning to implement it into a different language. I also did thorough research on different potential AI models, determining which would be best to implement based on the existing tech stack and financial circumstances (our budget).

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

- Brainstormed potential AI models that can be utilized
- Experimented and researched the given AI models
- Helped to build the Cohere model endpoint and test it
- Built Google's Gemini handler implementation
- Created a test case to ensure the handler is functional
- 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 brainstorming potential models and researching them.
- I collaborated with Andrew to test the Cohere model
- I worked independently on the Gemini handler implementation and the test case

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 well. In the initial stages of the sprint, I devoted time towards brainstorming and researching different AI models and implementations. Over the weekend, I focused on building the Gemini handler implementation, with a test to run the model to ensure it was functional. Overall, I made contributions early onto the sprint and ensured that the AI issues were closed out early.