**Iteration Build Folder**

**1. Development Artefacts**

The project aims to help high school students choose their high school subjects based on the industry they want to work in and the university major they want to pursue.**🔧 Backend API Overview (Flask)**

* Implemented the /api/getUniInfo endpoint to return university and major information based on career or job names.
* Database models built using SQLAlchemy:
  + db\_uni: University information
  + db\_major: Major information
  + db\_uni\_major: Relationship between universities and majors
  + db\_career: Career information
  + major\_careers\_relation: Relationship between majors and careers
  + db\_job\_type: Job types
  + job\_career\_relation: Relationship between jobs and careers

**💻 Frontend Structure (Vue3 + Bootstrap)**

* Built with Vite and Vue Router for routing.
* Key components:
  + CareerQuiz.vue: Career interest assessment page
  + ResultView.vue: Displays recommended majors and universities
  + App.vue and main.js: Application entry point

**📊 Data Flow Description**

* The frontend sends requests to the /api/getUniInfo API using Axios with career name parameters.
* The backend queries the database and returns corresponding majors and universities.
* The frontend dynamically renders the data to the user interface.

**2. Pair Programming Observations**

**Programming Rotation Log:**

* Week 3-4: Find and organize open data sources.
* Week 5: Develop front-end Q&A components and homepage, and focus on API debugging.

**3. GitHub Links & Code Repository**

* **GitHub Repository**: <https://github.com/universekylin/FIT5120>
* **Branch Structure**:
  + main: Production-ready version
  + dev-backend: Backend development
  + dev-frontend: Frontend development

**4. First Cut at Technology To Be Used**

**Development Approach**

* Agile methodology with weekly iterations and sprint goals.
* Git for version control and feature branching.

**Frontend**

* **Framework**: Vue 3 + Composition API
* **Build Tool**: Vite
* **UI Framework**: Bootstrap 5
* **Routing**: Vue Router

**Backend**

* **Language**: Python
* **Framework**: Flask
* **Database**: MySQL (via pymysql driver)
* **Deployment**: AWS EC2