

Development Methodology: AI Code Converter

For our work on the AI Code Converter project, our team has decided to use the Agile methodology. We feel this is the best fit for our project for a few reasons:

- Regular Sponsor Feedback: We have weekly meetings scheduled with our sponsor. Working in two-week sprints lets us show them real progress at the end of each cycle, which works well with this schedule and keeps them in the loop.
- Fits Our Team's Skills: Our team has a good mix of skills in areas like AWS and Web Development, and we've used Agile before. We think this is the best way for us to work together effectively.

We'll follow a regular schedule based on two-week sprints. Here's a look at our meetings and the things we'll produce. We plan to meet twice a week; On Tuesdays we'll do sprint planning and syncs/check-ins, and Thursdays we meet with our sponsor, and will discuss the progress we made, ask clarifying questions and demo progress as needed. We also plan to keep an updated backlog of stories and features in Jira.

We assigned team roles as needed, however these are subject to change as the project progresses.

- Vandoran Huston - Product Owner / Developer
- Liang Liu - Scrum Master / Developer
- Brady Morin - Lead Sponsor Communication / Developer
- Alex Murphy - Developer
- Vitaliy Sviridyuk - Developer

We will use Git and the branching system for our work. Each story/task will have its own branch, and will merge into main when work is finished and reviewed. Before going to main, each branch must undergo a pull request, where it must be approved by 2 other developers before merging to main. We expect to utilize Github Actions/Workflows for our continuous integration testing.

The tools we are using are:

- Project Management and Communication - Jira, Discord and Gmail
- Development Tools - Github, Github Actions, AWS cloud shell and VS Code
- Tech Stack - React, Python, AWS, AWS EKS, AWS step functions, AWS etc. Kubernetes

We plan to track our progress primarily using the Jira board to keep track of which stories are complete, in progress, and in the backlog, and use this as a ratio to track our progress over the course of the project. We will also note the velocity of the team based on how quickly we complete stories.