

Current Plans for Technologies, Platform, and Languages

Web Application Summary

- React for frontend (HTML, CSS) (Paulos, Ian)
- Django Python for backend (Christian, Cole, Jixian)
- API keys (Cole, Christian, Paulos)
- Database (Paulos)

Web Application Explanation

We are going to divide the project into front-end, back-end and API implementation. Each of these pieces will be covered by a team of two to three people.

On the front-end, we are going to use HTML and CSS with React. This will be done by Ian and Paulos who will learn React for this project and have experience with HTML and CSS already. The frontend interface will be simple, stylish, and easy to use. We chose Ian and Paulos for this part of the project because they are well experienced with HTML and CSS compared to the other group members, as other group members are more experienced with Python/API's.

Christian, Cole and Jixian will use Django Python for backend. They are all experienced with Python, however none of us have used Django before, so we will be learning how to use it. We chose Christian, Cole, and Jixian to work on the backend because they are all very experienced with Python and are very excited to work on the backend of the project. Cole and Paulos will work together on the AI API keys integration.

To grab the repositories from Github into our website, we will be using the GithubAPI to view the code that the user has written within their Github repositories. Afterwards we will input the code we grabbed into the GPT API to generate a text description to post for them. As part of our MVP, we will only have functionality to generate a post that doesn't push to LinkedIn, users will copy this text and post it themselves. We would like to implement functionality with LinkedIn and image generator for posts, but these fall outside of our MVP while being our highest priority features.

We allocated our first week to learn the required technologies for this project which are Django and React. Afterwards, we will utilize our design document to start implementing the different functionalities in our MVP. We are planning to try to frontload the majority of our MVP requirements early on, so we can focus on API integration and additional high-priority features later on in the quarter. We chose to use the Github and GPT API because they support the functionality we want to derive. They allow us to get information from github repositories and generate text for free by using minimal OpenAI

credits. The first high-priority feature we would plan on implementing would be a way to post generated AI text through social media sites within Automates.

Implementation Plan

Week 6 (October 27th - November 2nd)

- Christian: Exam on Thursday (Slightly Busy)
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| Front End | <p>Overall Goal: Learn React</p> <p>Paulos:</p> <ul style="list-style-type: none">• Learn React by prototyping the home page <p>Ian:</p> <ul style="list-style-type: none">• Learn React by prototyping the home page |
| Back End | <p>Overall Goal: Learn Django</p> <p>Cole:</p> <ul style="list-style-type: none">• Learn Django <p>Christian:</p> <ul style="list-style-type: none">• Learn Django <p>Jixian:</p> <ul style="list-style-type: none">• Learn Django |
| APIs (Github, OpenAI) | <p>Overall Goal: Research API usability</p> <p>Christian:</p> <ul style="list-style-type: none">• Understand how github's REST API works as well as if LinkedIn's API is usable to make posts <p>Cole:</p> <ul style="list-style-type: none">• Understand the costs associated with OpenAI.- and DALL-E models and their usability in our projects. <p>Paulos:</p> <ul style="list-style-type: none">• Will aid in implementation if Cole and Christian need help |

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| Database | <p>Overall Goal: N/A (Week 7 found out we needed one)</p> <p>Paulos:</p> <ul style="list-style-type: none"> |
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- Paulos: Two Exams on Friday

Week 7 (November 3rd - November 9th)

- CS187 midterm on Wednesday/Friday
- Christian: Quiz on Thurs/Friday, Onboarding for Job
- Paulos: Quiz and Midterm on Friday

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| Front End | <p>Overall Goal: finishing home page</p> <p>Paulos:</p> <ul style="list-style-type: none"> • Build home page <ul style="list-style-type: none"> ◦ Building home page structure ◦ Styling the home page ◦ Consult the class diagram <p>Ian:</p> <ul style="list-style-type: none"> • Finish home page <ul style="list-style-type: none"> ◦ Building home page structure ◦ Styling the home page ◦ Consult the UML diagram |
| Back End | <p>Overall Goal: Create backend logic.</p> <p>Cole:</p> <ul style="list-style-type: none"> - Create functionality based on design. + Create class diagram + Consult with backend functions <p>Christian:</p> <ul style="list-style-type: none"> • Research how to utilize github's REST API to access repositories • Create structure for the files of the project <p>Jixian:</p> <ul style="list-style-type: none"> • Create backend logic, overall structure |

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| | and functions |
| APIs (Github, OpenAI) | <p>Overall Goal: Start creating GitHub API</p> <p>Christian:</p> <ul style="list-style-type: none"> Begin creation of button to link github/generate user OAuth Token Create LinkedIn Dev account and get OAuth Token <p>Cole:</p> <ul style="list-style-type: none"> Create Github API <p>Paulos:</p> <ul style="list-style-type: none"> Will aid in implementation if Cole and Christian need help |
| Database | <p>Overall Goal:</p> <p>Paulos:</p> <ul style="list-style-type: none"> |

Week 8 (November 10th - November 16th)

- Cole has a test on wednesday

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| Front End | <p>Overall Goal: prototyping chat page</p> <p>Paulos:</p> <ul style="list-style-type: none"> prototyping chat page <ul style="list-style-type: none"> Building chat page structure Styling the chat page <p>Ian:</p> <ul style="list-style-type: none"> prototyping chat page <ul style="list-style-type: none"> Building chat page structure Styling the chat page Create accounts page and minimal functionality Write help page |
| Back End | <p>Overall Goal: Create backend logic for integration with Github API.</p> <p>Cole:</p> <ul style="list-style-type: none"> Integrate github API calls with backend logic. |

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| | <p>Christian:</p> <ul style="list-style-type: none"> • Create backend functions to utilize REST API to fetch github repos <p>Jixian:</p> <ul style="list-style-type: none"> • Integrate github API calls with backend logic. Do supplemental codings as cooperating with Christian and Cole |
| API Keys (Github, OpenAI) | <p>Overall Goal: Start creating GPT API, Finish Github API</p> <p>Christian:</p> <ul style="list-style-type: none"> • Primary: Begin work on integrating LinkedIn API Complete Login to github button • Secondary: Research and create GPT API If Github is complete, work on LinkedIn API <p>Cole:</p> <ul style="list-style-type: none"> • Research and create GPT API <p>Paulos:</p> <ul style="list-style-type: none"> • Will aid in implementation if Cole and Christian need help |
| Database | <p>Overall Goal:</p> <p>Paulos:</p> <ul style="list-style-type: none"> • |

Week 9 (November 17th - November 23rd)

- Cole has a test on wednesday
- Christian has a project due Wednesday (Slightly Busy)

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| Front End | <p>Overall Goal: finishing chat page</p> <p>Paulos:</p> <ul style="list-style-type: none"> • Finish chat page <ul style="list-style-type: none"> ◦ Finish building chat page structure ◦ Finish styling the chat page • <p>Ian:</p> <ul style="list-style-type: none"> • Finish chat page <ul style="list-style-type: none"> ◦ Finish building chat page structure |
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| | <ul style="list-style-type: none"> ○ Finish styling the chat page ○ Finish up and loose ends |
| Back End | <p>Overall Goal: Create backend logic for integration with GPT API.</p> <p>Cole:</p> <ul style="list-style-type: none"> • Integrate GPT API calls with backend logic. <p>Christian:</p> <ul style="list-style-type: none"> • Integrate Linkedin/Github calls with backend logic. <p>Jixian:</p> <ul style="list-style-type: none"> • Integrate GPT API calls with backend logic. |
| API Keys (Github, OpenAI) | <p>Overall Goal: Ensure functionality of all APIs.</p> <p>Christian:</p> <ul style="list-style-type: none"> • Test functionality of github API calls <p>Cole:</p> <ul style="list-style-type: none"> - Ensure proper handling of all API calls. + Test functionality of ChatGPT API calls <p>Paulos:</p> <ul style="list-style-type: none"> • Will aid in implementation if Cole and Christian need help |
| Database | <p>Overall Goal:</p> <p>Paulos:</p> <ul style="list-style-type: none"> • |

Week **Thanksgiving Break** (November 24th - November 30th) **Thanksgiving Break**

- Christian will be traveling (A couple very busy days)

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| Front End | <p>Overall Goal: Finalize MVP from Frontend</p> <p>Paulos:</p> <ul style="list-style-type: none"> • Finish anything else <p>Ian:</p> <ul style="list-style-type: none"> • Finish anything else |
| Back End | <p>Overall Goal: Finalize MVP from Backend</p> <p>Cole:</p> |

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| | <ul style="list-style-type: none"> Finalize all code in MVP. <p>Christian:</p> <ul style="list-style-type: none"> Finalize unfinished work to complete MVP. If github API is functional, ensure the rest of the functions related to it are also functional <p>Jixian:</p> <ul style="list-style-type: none"> Finalize any remaining code needed to complete our MVP |
| API Keys (Github, OpenAI) | <p>Overall Goal: Consider API's outside of MVP (Linkedin)</p> <p>Christian:</p> <ul style="list-style-type: none"> Research Linkedin basic developer available functionality. Work to implement Linkedin API, assuming the rest of github's API is done <p>Cole:</p> <ul style="list-style-type: none"> Research Linkedin API and its usability. <p>Paulos:</p> <ul style="list-style-type: none"> Will aid in implementation if Cole and Christian need help |
| Database | <p>Overall Goal:</p> <p>Paulos:</p> <ul style="list-style-type: none"> |

Week 10 (December 1st - December 7th)

Christian: Exam this week (Slightly Busy)

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| Front End | <p>Overall Goal: Implement new pages that incorporate high-priority features outside of MVP.</p> <p>Paulos:</p> <ul style="list-style-type: none"> Adding into chat page a way to post AI generated text to social media site <p>Ian:</p> <ul style="list-style-type: none"> Adding into chat page a way to post AI generated text to social media site |
| Back End | <p>Overall Goal: Implement any features outside</p> |

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| | <p>of MVP.</p> <p>Cole: Finalize all code in the project.</p> <ul style="list-style-type: none"> • Integrate existing functionality with new features <p>Christian:</p> <ul style="list-style-type: none"> • Final testing of features dealing with API calls <p>Jixian:</p> <ul style="list-style-type: none"> • Confirm all functionality is working properly, edge testing, improve performance |
| API Keys (Github, OpenAI) | <p>Overall Goal: Ensure functionality of all APIs.</p> <p>Christian:</p> <ul style="list-style-type: none"> • Final Testing of all API calls <p>Cole:</p> <ul style="list-style-type: none"> • Ensure proper handling of all API calls. <p>Paulos:</p> <ul style="list-style-type: none"> • Will aid in implementation if Cole and Christian need help |
| Database | <p>Overall Goal:</p> <p>Paulos:</p> <ul style="list-style-type: none"> • |

New Project Manager: Paulos

Documentation Update:

- Cole will update the class diagram
- Paulos will update the sequence diagram
- Christian will update the activity diagram

Full UI Mockup:





