

Midterm Activity – Social Coding Midterm Project

# Social Coding Selection

Select a social coding project application for your team from the below options:

* Option 1: Feature enhancements of the Lab 4.9.2 code by adding user-friendly features to the MapQuest REST API [Level of difficulty: +++]
* Option 2: Adapting the Lab 4.9.2 python framework to integrate GPT-3/GPT-4 REST API [Level of difficulty: ++++]

What were the reasons your team selected this option?

Team name Innovate X

Our group selected for Alternative 2 since joining GPT-3/GPT-4 into our Python system offers unparalleled openings for development and separation. By leveraging progressed AI capabilities, we point to form a more flexible and effective application that goes past conventional mapping functionalities. This choice adjusts with our commitment to pushing the boundaries of innovation, upgrading client encounters, and maintaining a competitive edge within the advertise.

Describe your team's project application and its deliverables. What are the specific objectives of this application?

Our team's extend application may be a dynamic mapping and data recovery instrument planned to supply clients with comprehensive location-based administrations. The center objective of this application is to consistently coordinated mapping functionalities with progressed AI capabilities, particularly leveraging the GPT-3/GPT-4 REST API.

The deliverables of our project include:

1. \*\*Integration of GPT-3/GPT-4 API\*\*:

We are going adjust our existing Python system to join the GPT-3/GPT-4 API consistently. This will empower clients to connected with the application utilizing characteristic dialect inquiries and get shrewdly reactions produced by the AI show.

2. \*\*Improved Client Involvement\*\*:

By joining progressed AI capabilities, our application will offer an instinctive and user-friendly involvement. Clients will be able to inquire questions, get suggestions, and lock in in discourse with the AI, upgrading their generally encounter.

3. \*\*Extended Usefulness\*\*:

Past conventional mapping highlights, our application will offer a wide run of functionalities fueled by GPT-3/GPT-4, counting creating expressive stories, giving authentic context, and suggesting focuses of intrigued based on client inclinations.

4. \*\*Adaptability and Optimization\*\*:

We are going guarantee that our application is versatile and optimized to handle a huge volume of user demands whereas keeping up tall execution. This incorporates implementing efficient caching components and optimizing API calls to play down idleness.

5. \*\*Documentation and Bolster\*\*:

Comprehensive documentation will be given to direct clients in leveraging the application's highlights viably. Also, progressing back will be advertised to address any issues or questions that may emerge.

The particular destinations of our application incorporate:

- Giving clients with exact and pertinent data based on their area and inclinations.

- Improving client engagement and interaction through characteristic dialect inquiries and cleverly reactions.

- Separating our application within the advertise by advertising progressed AI-driven functionalities.

- Making a versatile and productive stage that can oblige a developing client base.

- Persistently moving forward and repeating on the application based on client criticism and developing innovations.

Reasons for choosing these targets incorporate:

1. \*\*User-Centric Approach\*\*:

Our center on upgrading the client involvement and giving profitable functionalities adjusts with our goal of making a compelling and valuable application for our target group of onlookers.

2. \*\*Advancement and Separation\*\*:

By integrating advanced AI capabilities, we point to distinguish our application from competitors and offer unique value to clients.

3. \*\*Versatility and Optimization\*\*:

Guaranteeing adaptability and optimization is vital for pleasing a developing client base and keeping up a tall level of execution and unwavering quality.

4. \*\*Documentation and Back\*\*:

Comprehensive documentation and continuous bolster are basic for encouraging client selection and guaranteeing a positive involvement with the application.

Generally, our venture points to use the synergies between mapping technologies and AI to form a modern and user-friendly application that addresses the assorted needs of our clients.

Record your team member roles and skillsets

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| --- | --- |
| Team member | Role/Knowledge/Skillset |
| **Askarov Azizjon(12214751)** | **Facilitator** |
| **Kiyomov Asadbek(12225264)** | **Recorder** |
| **Khudoyberdiev Madaminbek (12225246)** | **Team Member** |
| **Bakhromov Adkham (12214746)** | **Team Member** |
|  |  |

# Strategy/Project Plan

Provide a brief description of your team’s strategy for completing this project.

Our team's procedure for completing this venture includes a comprehensive approach that includes a few key stages, counting arranging, improvement, testing, arrangement, and progressing emphasis. Each stage is carefully organized to guarantee that we meet our venture destinations viably and provide a high-quality application that surpasses client desires.

1. \*\*Arranging and Inquire about\*\*:

We start by conducting exhaustive inquire about to get it the necessities of our target gathering of people and the capabilities of the GPT-3/GPT-4 API. This includes gathering client input, analyzing competitor offerings, and investigating the documentation and assets accessible for joining the API into our application.

2. \*\*Plan and Design\*\*:

Based on our investigate discoveries, we plan the design of our application, taking under consideration components such as adaptability, execution, and client encounter. We characterize clear interfacing and information streams to encourage consistent integration with the GPT-3/GPT-4 API whereas guaranteeing that our application remains secluded and viable.

3. \*\*Advancement\*\*:

With the engineering in put, we continue to the advancement stage, where we actualize the vital highlights and functionalities of our application. This incorporates coordination the GPT-3/GPT-4 API, building the mapping interface, actualizing common dialect handling capabilities, and creating client interaction highlights.

4. \*\*Testing and Quality Affirmation\*\*:

All through the advancement handle, we conduct thorough testing to distinguish and address any bugs, mistakes, or execution issues. This includes both robotized testing, utilizing instruments such as unit tests and integration tests, as well as manual testing to approve the application's behavior and client involvement.

5. \*\*Sending and Rollout\*\*:

Once testing is total and the application meets our quality measures, we continue to send it to generation situations. We carefully arrange the rollout prepare to play down disturbance to clients and guarantee a smooth move from improvement to generation.

6. \*\*Observing and Optimization\*\*:

After deployment, we proceed to screen the application's execution and client input closely. We utilize analytics and client measurements to recognize regions for advancement and optimization, such as optimizing API utilization, refining client interfacing, and improving AI capabilities.

7. \*\*Iterative Advancement\*\*:

Our advancement handle is iterative, with standard cycles of arranging, advancement, testing, and arrangement. We prioritize criticism from clients and partners to direct our continuous advancement endeavors and guarantee that the application remains important and important over time.

8. \*\*Documentation and Bolster\*\*:

All through the venture, we prioritize the creation of comprehensive documentation to direct clients in utilizing the application viably. We moreover give continuous back to address any questions or issues which will emerge, guaranteeing a positive encounter for clients.

By taking after this key approach, our group points to provide a strong, imaginative, and user-friendly application that leverages the power of progressed AI capabilities to supply important location-based administrations to our clients.

# Using GitHub for Collaboration

What is the link to your GitHub repository?

https://github.com/akiyomov/InnovateX-Software-Engineering-Course

Describe how GitHub was used to:

1. Create branches (in the context of this project)

\*\*GitHub Utilization SOP for InnovateX Group Store\*\*

\*\*1. Making Branches:

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- Explore to the most department of the store on GitHub.

- Press on the department dropdown menu found at the top-left.

- Select "Make a modern department" choice.

- Title the department taking after the organize:

'assignment--' or 'task--'.

- Make the department.

\*\*2. Including Group Individuals:

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- Group individuals can be included straightforwardly through GitHub by welcoming them to collaborate on the store.

- Welcomed individuals can at that point clone the store and make their branches based on the task necessities.

\*\*3. Workflow for Task Accommodation:

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a. \*\*Work on Task:

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- Group individuals make or checkout to their particular branches based on the task they are working on.

- They include their work to the department, guaranteeing appropriate naming and organization concurring to task necessities.

b. \*\*Commit Changes:

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- Commit changes to the department routinely as work advances.

c. \*\*Thrust Changes:

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- Once work is total or at a steady checkpoint, thrust the commits to the store, guaranteeing they are pushed to the proper department.

d. \*\*Open a Drag Ask (PR):

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- After pushing changes, open a drag request for the department against the most department.

- Give a clear title and portrayal for the drag ask, showing the reason of the changes.

e. \*\*Code Audit:

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- Team leads or doled out analysts survey the code changes within the drag ask.

- They give criticism, proposals, or ask adjustments on the off chance that vital.

f. \*\*Combine Changes:

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- Once the code changes pass survey and any asked alterations are made, the department can be combined into the most department.

- Consolidate the changes by means of the GitHub interface, guaranteeing the option to erase the department after consolidating is selected in the event that it's not required.

\*\*4. Rules:

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- Follow naming traditions for branches and commits.

- Incorporate a README record in each department with a brief clarification of the task and informational on running any code in case pertinent.

- Guarantee code quality by following to coding measures, giving legitimate documentation and comments.

\*\*5. Back:

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- For any questions or help, group individuals can reach out to group leads or utilize the repository's Issues segment to look for offer assistance.

Thank you for taking after these strategies to contribute viably to the InnovateX team's victory within the Program Building course!

1. Add team members (and their branches/commits)

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| --- | --- |
| Team member | Role/Knowledge/Skillset |
| **Askarov Azizjon(12214751)** | https://github.com/akiyomov/InnovateX-Software-Engineering-Course/tree/aziz-midterm |
| **Kiyomov Asadbek(12225264)** | https://github.com/akiyomov/InnovateX-Software-Engineering-Course/tree/mid-term |
| **Khudoyberdiev Madaminbek (12225246)** | https://github.com/akiyomov/InnovateX-Software-Engineering-Course/tree/madamin-mid-term |
| **Bakhromov Adkham (12214746)** | https://github.com/akiyomov/InnovateX-Software-Engineering-Course/tree/adam-mid-term |
|  |  |

1. Mention pull requests, code review, merge, etc. (in the context of this project)

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| --- | --- |
| Team member | Role/Knowledge/Skillset |
| **Askarov Azizjon(12214751)** | aziz mid-term branch to mid-exam PR sent by azizjon, reviewed MRed by Asadbek |
| **Kiyomov Asadbek(12225264)** | asadbek branch to mid-exam PR sent by Muhammadamin, reviewed MRed by Asadbek |
| **Khudoyberdiev Madaminbek (12225246)** | **Madaminbek** mid-term branch to mid-exam PR sent by **Madaminbek**, reviewed MRed by Asadbek |
| **Bakhromov Adkham (12214746)** | **Adkham** mid-term branch to mid-exam PR sent by **Adkham**, reviewed MRed by Asadbek |
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# Final Deliverables

**Presentation**

Create a presentation about the project you selected. Your presentation should include:

* Information about your application, covering what features your team included
* The reasons that your team decided on these specific features in your application
* Application code including comments and documentation. Your comments and documentation should be sufficient for any other team to be able to continue the project if required. Another team should be able to understand the application, your features and how to continue with the project
* Demonstration of the application
* List of future enhancements (backlog)
* Reflection points – what issues have you faced while working on this activity, how did you find solutions, what have you learned, etc.