**Intelligent Crop Planning and Management using ML**

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CSIS 4495: Applied Research Project

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**Work Log**

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| --- | --- | --- |
| **Date** | **Description of work done** | **Number of hours** |
| March 31, 2025 | Fetch data based on user’s IP address | 1 |
| April 1, 2025 | Changed the layout of home page | 1.5 |
| April 2, 2025 | Used open-meteo API to fetch 30-day soil data | 2 |
| April 3, 2025 | Used JavaScript to display the trends of soil in using trend line graphs | 3 |
| April 4, 2025 | Calculated increase, decrease or stability in the trend lines | 0.5 |
| April 6, 2025 | Created trend line graphs for the weekly recommendation dashboard | 1.5 |

This week, I used JavaScript to create trend line graphs displaying soil trends, calculated whether the values showed an increase, decrease, or remained stable, and added these visualizations into the dashboard. Additionally, I modified the layout of the homepage to improve user experience. While doing this, I encountered difficulties mostly in working with JavaScript and occasionally with CSS, and particularly when handling dynamic data visualization. To fix these, I mostly relied on trial and error and debugging,