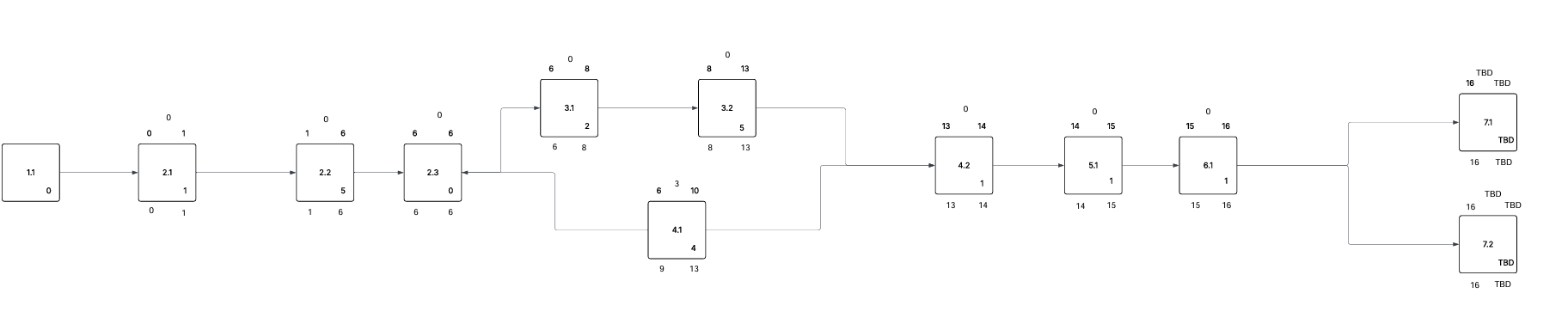
Gantt Chart

**Description**: *This Gantt chart presents the project timeline, highlighting key tasks along with their respective hard and soft deadlines. It serves as a structured guide to ensure timely project completion through clear, actionable steps.*



Critical path: 1.1, 2.1, 2.2, 2.3, 3.1, 3.2, 4.2, 5.1, 6.1, 7.2

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| --- | --- | --- | --- |
| **ID** | **Task** | **Predecessor** | **Duration (days)** |
| 1.1 | Initial meeting | None | 0 |
| 2.1 | Obtain data | 1.1 | 1 |
| 2.2 | Clean data | 2.1 | 5 |
| 2.3 | Determine analysis plan and data structure | 2.2 | 0 (done in group meeting) |
| 3.1 | Get extra data | 2.3 | 2 |
| 3.2 | Clean data and transform it | 3.1 | 5 |
| 4.1 | Exploratory data analysis on existing data | 2.3 | 4 |
| 4.2 | EDA on new data | 3.2, 4.1 | 1 |
| 5.1 | Come up with ideal models and write insights | 4.2 | 1 |
| 6.1 | Prepare for mid-point check-in | 5.1 | 1 |
| 7.1 | Work on presentation | 6.1 | TBD |
| 7.2 | Work on final report | 6.1 | TBD |

Quality Plan

**Description**: *The quality plan outlines the team's objectives, methods, criteria, and the purpose for each task discussed with the client upfront. These commitments serve as the foundation of our approach and represent our promise to deliver clear, actionable insights by the end of the project, helping our client make informed decisions and achieve their goals.*

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| **Deliverable** | **Method** | **Criteria** | **Purpose** |
| Initial meeting | Meet with clients via video call to discuss the project goals. | Sign the project charter to confirm mutual agreement. | Understand the expectation of our client. |
| Find Source data | Review ability to make potential analytical insights from the data. | Data has information on location, topography and fuel type that can be linked to existing data | Get more secondary data that can improve the prediction. |
| Clean data | Review ability to make accurate insights on the data without any errors due to data quality. | Whether all unrelated variables, outliers, and Nan are removed. Ensure to resolve data duplications, incorrect data types and data inconsistencies. | Format the data to apply any descriptive and predictive analytics. To ensure the same data is used for further analytic applications |
| Data modeling | Judge ability to link the datasets together to produce a structured dataset that can be used to make appropriate predictive models. | Whether data tables are all linked together in Power BI without any data discrepancies. | Link datasets to make appropriate visualisations and models. |
| EDA and insights | Create visuals | Whether all the best practices in visualizations are met. Do all the charts, tables, and visuals support the key insights and conclusions. Whether the visuals are cleaned and straightforward. | Gain an overview of the data demographics before proceeding with further analysis and model development |
| Modeling | Review prediction accuracy of the property damage and risk of fires for BC | Whether the models support the project end goals. Do the models built with cross-validation plus evaluation metrics at the end. Can the models work well on a new random data input. | To again insights from the predictive models and help building the report |

Risk Register

**Description**: *The risk table outlines 10 positive and negative risks that may impact the project. Each risk is classified by its likelihood of occurrence and level of impact, allowing us to anticipate potential challenges and opportunities. This proactive assessment helps us refine our assumptions and define the project scope more accurately, ensuring better preparedness throughout the project lifecycle.*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Date raised** | **Risk description** | **Likelihood of the risk occurring** | **Impact if the risk occurs** | **Severity** | **Owner** | **Response** | **Action** | **Contingent action** | **Status** |
| 1 | 4/6/2025 | Data Quality | Medium | High | High | Team members | Accept | Look for the most appropriate resources as much as possible. | The low model accuracy can be improved as much as possible during the project period | Open |
| 2 | 4/6/2025 | Data Completeness | Medium | Medium | Medium | Team members | Accept | Look for the most appropriate resources as much as possible. | The lack of completeness may lead to inaccurate models, but efforts will be made to improve this as much as possible during the project period | Open |
| 3 | 4/6/2025 | Behind Schedule | Low | High | Medium | Team members | Avoid | Create a project plan and keep each other accountable for following it | The project timeline did not go as expected and will be handled in accordance with the team charter | Open |
| 4 | 4/6/2025 | Misaligned with the client's expectations | Medium | High | High | Project manager | Avoid | Report progress at midterm meetings and maintain communication. | Revise the project plan as early as possible. | Open |
| 5 | 4/6/2025 | Lack of training and insufficient knowledge of the software | Medium | Low | Low | Team members | Mitigate | Team members take initiative to learn independently. | Seek alternative solutions. For example, by using known software. | Open |
| 6 | 4/6/2025 | Model can be further expanded (positive) | Medium | Medium | Medium | Project manager | Share | For the project sponsor's further research. | Opportunity | Open |
| 7 | 4/6/2025 | Gain an understanding of wildfires (positive) | Medium | Low | Low | Team members | Enhance | Gain insights into wildfires from various angles | Opportunity | Open |
| 8 | 4/6/2025 | Map-based visualization (positive) | Medium | Low | Low | Team members | Enhance | Learn new data visualization methods to better present results | Opportunity | Open |
| 9 | 4/6/2025 | Access to additional data sources mid-project (positive) | Medium | High | High | Team members | Enhance | Try potential features that may enhance model performance earlier. | Opportunity | Open |
| 10 | 4/6/2025 | Early completion of project milestones (positive) | Medium | Medium | Medium | Team members | Enhance | Experiment with alternative modeling techniques and feature engineering strategies to improve the accuracy and robustness of the wildfire prediction model. | Opportunity | Open |

Control Plan

**Description**: *The team will maintain regular communication with the clients (Dr.* ***Vidya and Janet****) and Linda via email for questions, data requests, or guidance on project approaches. Two meetings will be scheduled before the final presentation to review and confirm the team’s approach, and to refine findings to align with the client’s expectations. All communication will be conducted through email, unless an urgent matter arises—in which case the client’s phone number will be used. All meetings, including the final presentation, will be held virtually via Microsoft Teams, with reports and presentations shared to showcase insights.*

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| Plan | Date | Description | Method |
| Initial meeting | 03/31/2025 | Discuss project plan, expectations, scope and goal. | Virtual Team meeting |
| Mid-point checks up | 04/16/25 | Mid-point checking with the client to confirm the approaches and revise if applicable. | Virtual Team meeting |
| Final presentation | 05/27/25 | Present the final project results to the project sponsor. | To be discussed |