**Model Development Phase Template**

|  |  |
| --- | --- |
| Date | 29 June 2024 |
| Team ID | 739698 |
| Project Title | Acoustic Fire Extinguishing prediction |
| Maximum Marks | 5 Marks |

**Feature Selection Report Template**

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature** | **Description** | **Selected (Yes/No)** | **Reasoning** |
| Fire\_Type | Type of fire  ( Eg : electrical, chemical) | yes | Essential to predict the effectiveness of acoustic waves for specific fire types. |
| Temperature | Temperature of the fire | yes | Helps in determining the required intensity and frequency of acoustic waves. |
| Intensity | Intensity of the fire | yes | Critical for assessing the necessary power of waves |
| Humidity  Acoustic\_  Frequency | Humidity level in the environment  Frequency of the acoustic waves used | Yes  yes | Affects the propagation of acoustic waves.  Key parameter for the prediction model. |
| Duration | duration for which acoustic waves are used | yes | Important for evaluating the effectiveness over time |
| Success\_  Rate | Historical success rate of similar attempts | yes | Provides a basis for predicting future success |