Roadmap

**Predicting Mined Block for Pending Transactions (Multiclass Classification)**

# 1. Project Planning and Goal Definition

**Goal**:  
Build a multiclass classification model to predict the block number into which a pending transaction will be mined.

**Business Understanding:**

* Optimize transaction processing: Predicting block placement can help optimize gas fees and processing times.
* Identify MEV opportunities: Early prediction of block placement can be used for arbitrage or other financial gains.

# 2. Data Collection

* **Data Sources:**Provided by Instadapp Labs and loaded from Google Drive.
* **Data Overview:**
  + Pending Transactions: 431 transactions with 22 features.
  + Mined Transactions: 500 transactions with 26 features.

# 3. Exploratory Data Analysis (EDA)

* Visualize Data
* Feature Correlation Analysis
* Data Distribution

# 4. Data Preprocessing

* Data Cleaning
* Feature Engineering

# 5. Model Building

# 6. Model Training and Evaluation

# 7. Testing and Validation

# 8. Documentation and Reporting