

Crop Yield Prediction

**Revolutionizing Agriculture with
Data-Driven Insights**



Problem Statement

Challenges in Agriculture

- **Unpredictable Yields**
- **Climate Variability**
- **Economic Impact**



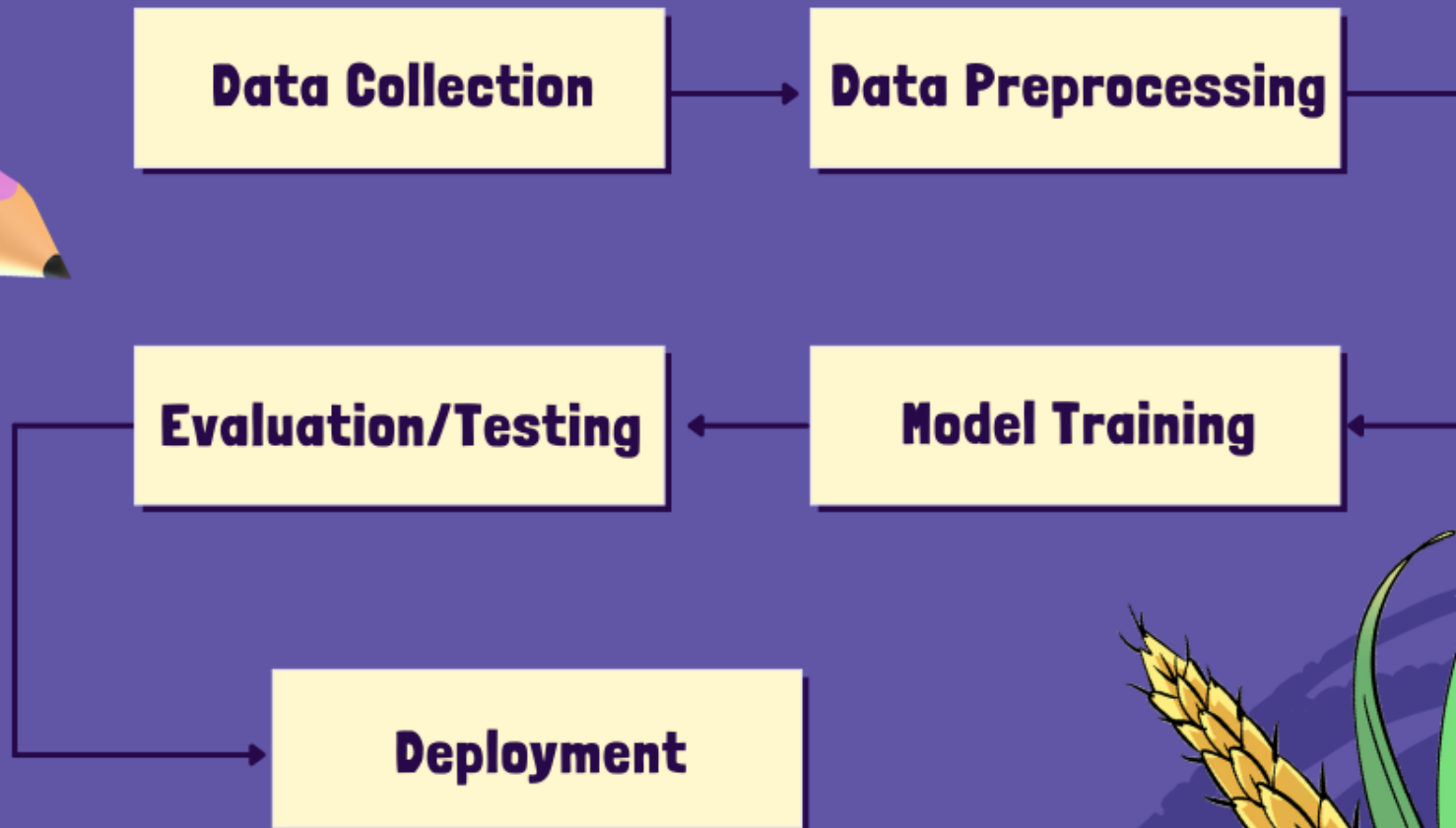
Market Opportunity

Potential Impact

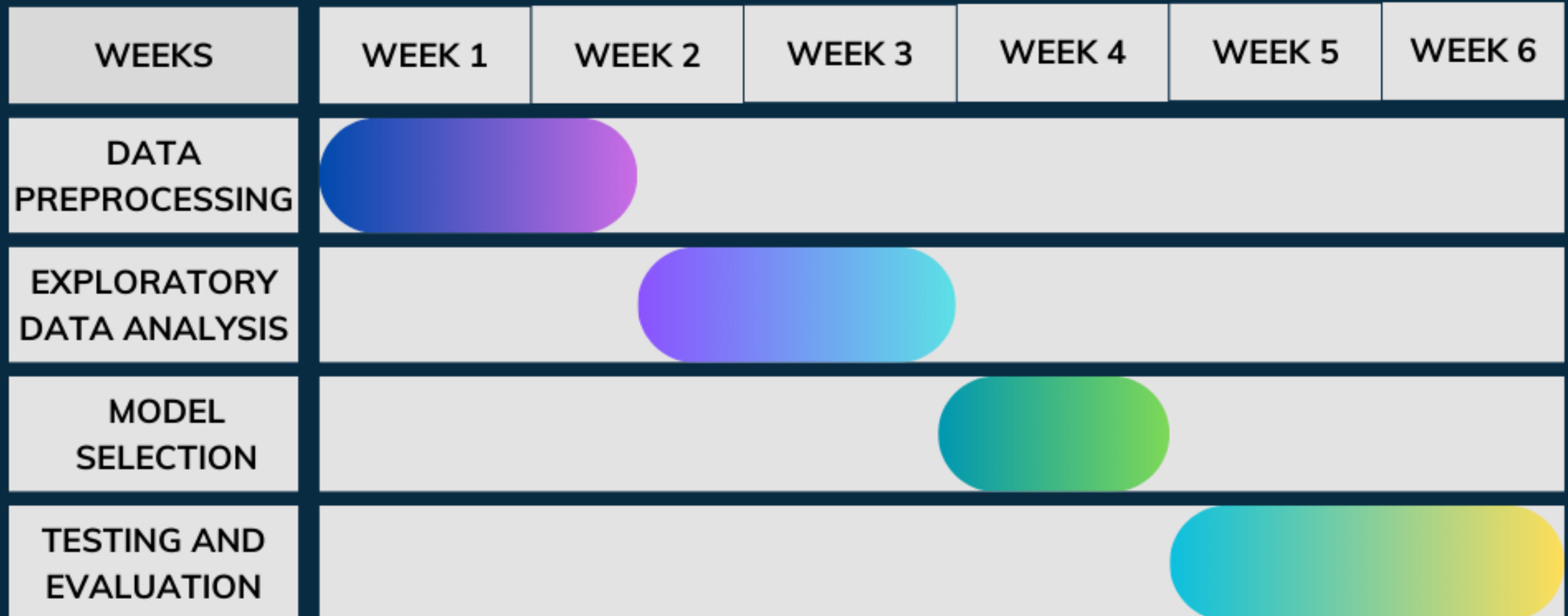
- **Global Agriculture Market**
- **Target Audience**
- **Potential Impact**

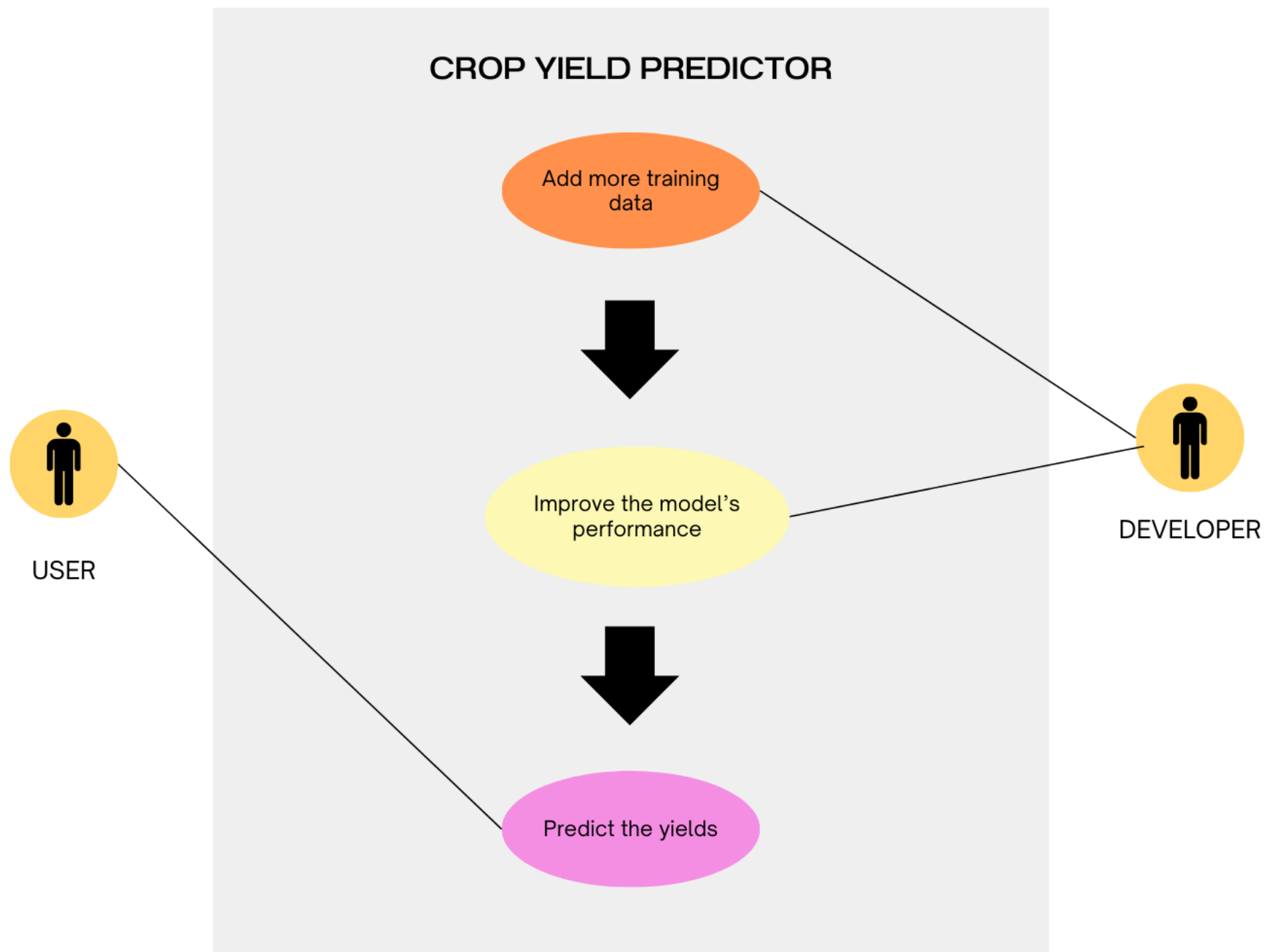


CROP YIELD PREDICTION



GANTT CHART PLANNING





Class Architecture

DATA PREPROCESSING

+data_source: Stores the original data
+preprocessed_data: Stores the preprocessed data

+load_data(): Loads the data
+clean_data(): Cleans the data
+feature_transformation(): Performs the necessary feature transformations

MODEL

+w: weights of the model
+b: bias of the model
(Extra hyperparameters depending on the most appropriate algorithm)

+intialize_hyperparameters(): Initialize the hyperparameters
+tune_hyperparameters(): Perform hyperparameter tuning
+train_model(): Train the model on processed data and make predictions on it.

Future Plans

- **Extensive Data Integration**
- **User Feedback**
- **Expanded Features**



Thank You!