**High-Level Design (HLD) Document**

**Objective:** Build and deploy a machine learning model that classifies cryptocurrencies as "High Liquidity" or "Low Liquidity" based on their market and trading features.

**System Overview:**

* Data Source: CoinGecko daily snapshots
* Processing: Google Colab (Python, Pandas, Scikit-learn)
* Model: Random Forest Classifier
* Interface: Streamlit Web App
* Deployment: Render (via GitHub)
* Web App Link: <https://project-4cjm.onrender.com>
* Activation Time: Available daily from 6 PM to 9 PM (IST)(reason:-because I am using free tier that’s why only few hours I will active this after I will suspended )

**Architecture Components:**

* Data Ingestion
* Feature Engineering
* Model Training & Evaluation
* Model Serialization (.pkl)
* Streamlit App UI
* Web Deployment on Render