

# PLN

# SPRINT1

Deliverables







# DELIVERABLES

- Data Understanding
- Data Pipeline
- Data Integration
- Database Architecture
   Testing the Model
- Data Scheduling

- Data Streaming into Tensorflow
- Creating Model using Python for

Accuracy

- Deploying the model

# Sprint 1 Development Timeline



15th Dec

31st Jar



# Deliverables Use crypto to trade

• Web Admin Panel

all global financial markets

TradeConnect let's you trade Forex, Indices,
Commodities and Precious Metals on a
single platform AND profit in BTC or ETH!

- WebApp Creation for Veroxai Platform and deployment on AWS platform
- IOS application Development and App Store distribution

Android application Development and Play Store distribution





# Sprint 2 Development Timeline

Sprint 2	Design	Development	Testing	Deployment
Web Admin Panel	30%	30%	20%	20%
Website Development with SEO	30%	30%	20%	20%
los & Android App Development	30%	30%	20%	20%

# SCOPE OF WORK



### Product Backlog SOW

The user should be able to log into the system with social integration, otp, email id.

The user should be able to change his password.

The user should be able to change his mobile number and email id.

The user should be able to change the appearance of the app, dark mode, light mode.

The system should be in English Language only.

The system should provide user friendly user interface.

The system should provide a simplistic user interface which guides and assists a new user to understand the application with ease.

The user should be able to see his profile details.

The user should be able to set price alert notification preferences for any particular crypto currency.

The system should be able to send push notification to user for his favourite cryptocurrencies trend changes while the application is n ot in use.

**1** 2

### Product Backlog & SOW

The user should be able to see his activity log.

The user should be able to see all available cryptocurrency live prices with accuracy.

The user should be able to see charts of the cryptocurrency with various different charting options. Ex. Candlesticks, Line, Bar ch art.

The user should be able to see Open High Low Close of the selected crypto currency.

The user should be able to see the charts in 1 minute, 3 minutes, 5 minutes 15 minutes, 30 minutes, 1 hour, 2-hour, 4-hour, 6-ho ur, 12-hour, 1 day, weekly, monthly and yearly basis.

All the crypto currencies should be plotted against USD (United States Dollars)

The user should be able to see a list of all the available cryptocurrencies in a list wise manner with their current price, with perce ntage change in up or down, current prices with absolute amount changes.

The system should show total trading volume of each coin.

The system should show highest and lowest price of each coin in last 24 hours.

The system should have a search widget where he/she can search cryptocurrencies.

The user should see news related to each selected currency

The user should see the daily top crypto recommendations

### Product Backlog & SOW

The software system should allow the user to see to see trend of the selected cryptocurrency (plotted on the chart as well as in list mode).

The system should generate buy or sell signals by applying artificial intelligence and machine learning algorithm in the back end.

The system should show the user the trend in a metered form at the lower part of application.

The system should show price and time when any specific part of the chart is touched by the user.

The system should have a page dedicated to news feed, market information and market alert.

The user should be able to select any cryptocurrency and mark it as favourite.

The user should be able to see those favourites in the list form first when he logs in, then other cryptocurrencies in alphabetical order.

The trend analysis generated signals should give accuracy of 85% and above.

The system should show crypto screener page where todays highest gainers, losers, 52 week high touchers, 52 week low toucher, highest volume.

The website developed should be SEO friendly with all Crypto Tags.

The system should be able to have a module for admin to share his tips on the market today.(Ie what to buy, sell, short sell etc.) and users can receive it as pus h notifications.

# TECHNICAL IMPLEMENTATION

### Development & Implementation



## Testing & Quality Assurance

- Co System testing
- L' User Acceptance Testing
- R Bug Fixing

### Planning & Analysis

- 102 Initial User Interface
- r'> Technology Selections
- Data Migration Analysis
- Co Gap & Fesibility Analysis







### Deployment & Delivery

- 1 Installation on staging environment
- Documentation of Functionalities
- Co Live / Production Rollout
- End User / Administrative Training

### Requirement Gathering

- Document Business Requirements
- n's Outline project scope
- къ Approx Project Estimation



### Maintenance & Support

- Post Change Request
- Post-deployment Support

# Front End

### TECHNOLOGIES TO BE USED

Website & Admin Front End:

ReactJS/Angular JS with HTML, CSS, JavaScript Libraries











# IOS & Android Hybrid Front End: React Native with Redux





# BackEnd

# Technologies To Be Used:

- Node Js: JavaScript runtime Framework For Backend
- Python with Django Framework for Data Science
- TensorFlow: Providing workflow to train model and deploy to Cloud.









# Databases

- Amazon RDS
- Dynamo DB
- e Redshift
- Mongodb

- Amazon EFS
- Amazon Glacier









# Code Repository

# Atlassian Bitbucket

# Cloud Partner





# AWS Big data query and monitoring tool

# Solutions Architecture





# Solutions Architecture





AmazonEKS

# Using Above mentioned tools and techniques, we will achieve:

- Meaningful data interpretation
- Analysis of sentiment data
- Lambda: Lambda functions fetch news, tweets, calculate sentiments and save to S3 buckets.
   Results from S3 are then rendered in QuickSight to display useful graphs for the user.
- QuickSight & Forecast: This providesus with a platform for analysis at AWS, It fetches data from S3 and processes the data to present graphs to be displayed on the website. The forecast was used for creating prediction based charts showing price variations for a cryptocurrency.
- Correlation of Crypto News Sentiments and Price Values

# Building ML Model

Steps involved in creating a Model:

Create-Dataset – Creates a Forecast dataset. The information about the dataset helps Forecast understand how to consume the data for model training.

Create-DatasetGroup – Creates a dataset group.

Import-Data – Imports your data into a dataset that resides inside a dataset group.

Create-Predictor – Creates a predictor with a forecast horizon that the parameters file specifies.

Create-Forecast – Creates the forecast and starts an export job to Amazon S3, including quantiles specified in the parameters file.

Update-Resources – Creates the necessary Athena resources and transforms the exported forecasts to the same format as the input dataset.

Notify Success – Sends an email alerting when the job is finished by posting a message to Amazon SNS.

Strategy-Choice – Checks whether to delete the Forecast resources, according to the parameters file.

Delete-Forecast – Deletes the forecast and keeps the exported data.

Delete-Predictor – Deletes the predictor.

Delete-ImportJob – Deletes the Import-Data job in Forecast.

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