



# Mobile Assistant for Cryptocurrency Markets

## **Team Members:**

Berkay ÇINAR

Bilge NAS

Celal ŞAHİN

## **Advisor:**

Dr. Faris Serdar  
TAŞEL

# Contents

1. Definiton
2. Problem
3. Previous Works
4. Analysis
5. Workplan
6. Materials and Methods
7. Solution
8. Design Concept
9. Results and Conclusion

# Mobile Assistant for Cryptocurrency Markets

A mobile application that gives insights for trading cryptocurrencies

## □ Main Features

- Track various cryptocurrencies
- Search for coins in supported markets
- Find profitable exchange chains
- Responsive design
- Works on Android environment

# Cryptocurrency Trading



Cryptocurrency	Price in USD	Price in EUR	Volume	Change
BTC Bitcoin	\$2,218.6	1m	11,111	+0.01%
ETH Ethereum	\$197.04	0.0001m	1,111	+0.01%
LTC Litecoin	\$42.42	0.001m	1,111	+0.01%
ETC Ethereum Classic	\$16.85	0.0001m	1,111	+0.01%



- ❑ Exchange of cryptocurrencies
- ❑ Buy/sell using real money and digital coins
- ❑ More than 15000 markets

# Previous Works

	<b>Blockfolio</b>	<b>Coinbase</b>	<b>CryptoAS</b>
Platform	Android & IOS	Android & IOS	Android
Price sources	N/A	N/A	Various markets
Exchange Assistant	N/A	N/A	Available
Market Info	N/A	N/A	Supported coins and fee policies



# Problem

- ◇ Displaying accurate prices of coins
- ◇ Support different stock markets
- ◇ Extraction of profitable exchange chains
- ◇ Keeping order books up to date

# Analysis

- ◇ Mobile solutions for stock marketing
- ◇ Using different algorithms for searching and AI
- ◇ Continuous data flow with APIs
- ◇ Pulling specific data from JSON files

```
{
  "BTC": {
    "short_code": "BTC",
    "name": "Bitcoin",
    "currency": "TRY",
    "current": "20000.01",
    "change_amount": "-799.98000000",
    "change_percentage": "4.0",
    "high": "20650",
    "low": "19200.03",
    "volume": "451.75"
  },
  "ETH": {
    "short_code": "ETH",
    "name": "Ethereum",
    "currency": "TRY",
    "current": "710",
    "change_amount": "-70.00000000",
    "change_percentage": "9.8",
    "high": "720",
    "low": "635.24",
    "volume": "1213851"
  },
  "TRX": {
    "short_code": "TRX",
    "name": "TRON",
    "currency": "TRY",
    "current": "0.1355",
    "change_amount": "-0.01930000",
    "change_percentage": "14.2",
    "high": "0.15",
    "low": "0.115",
    "volume": "6520"
  },
  "USDT": {
    "short_code": "USDT",
    "name": "USD Tether",
    "currency": "TRY",
    "current": "5.63",
    "change_amount": "-0.01000000",
    "change_percentage": "0.1",
    "high": "5.79",
    "low": "5.62",
    "volume": "13"
  },
  "BCH": {
    "short_code": "BCH",
    "name": "Bitcoin Cash",
    "currency": "TRY",
    "current": "734",
    "change_amount": "-32.10000000",
    "change_percentage": "4.3",
    "high": "749",
    "low": "680.01",
    "volume": "13"
  }
}
```

# Success Criteria

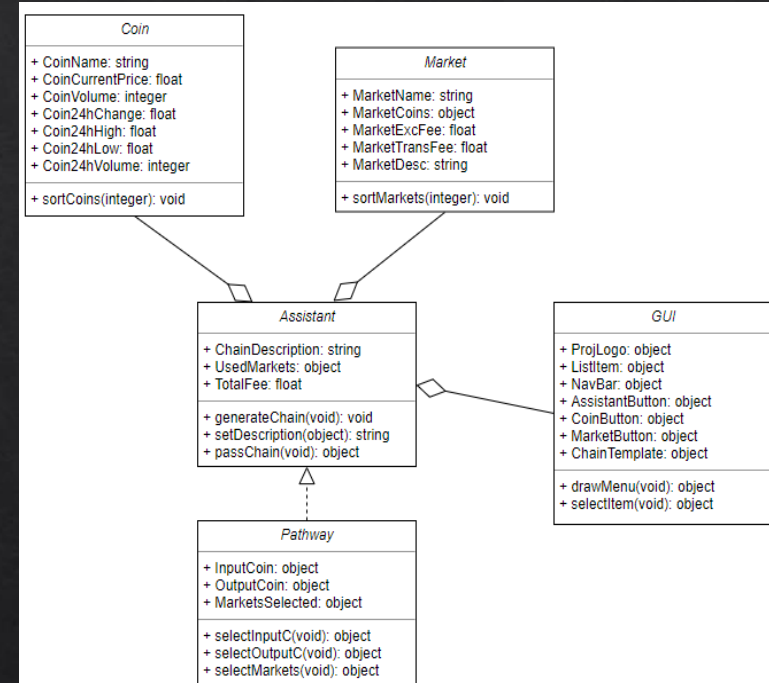
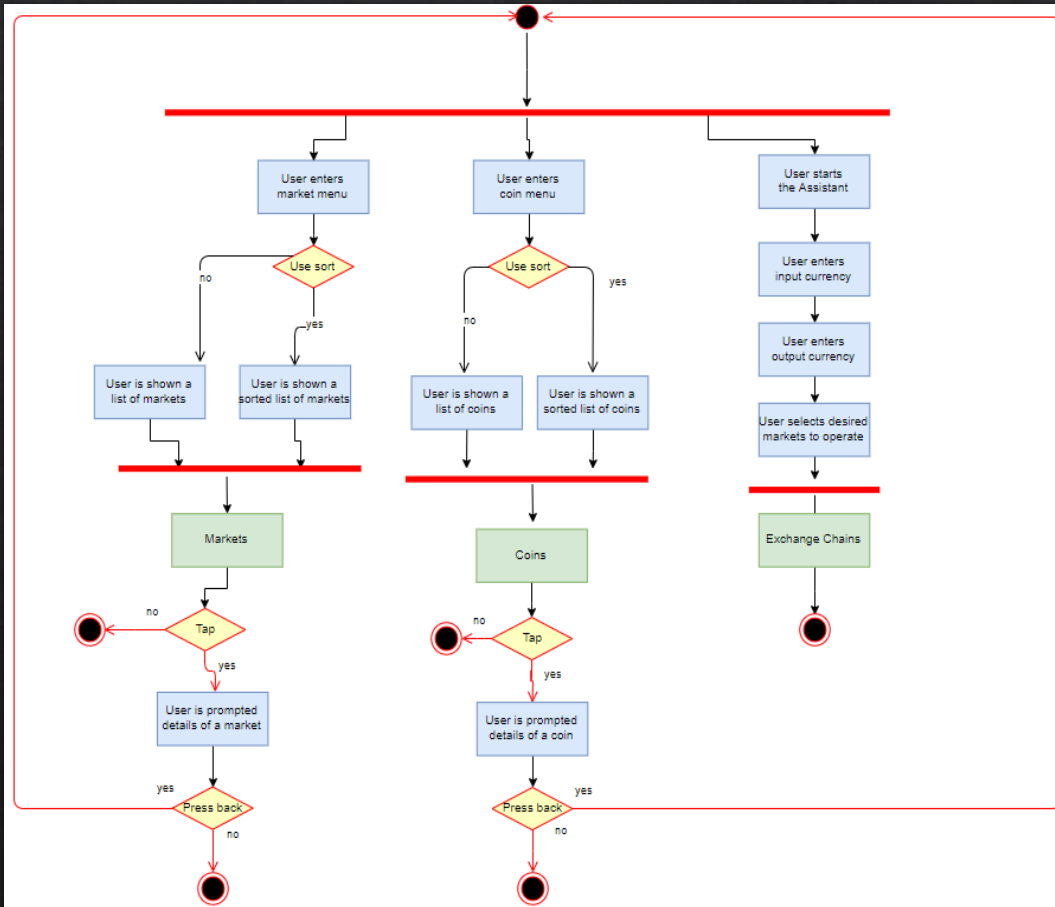
Success Criterion	How to Measure
Efficiency of Exchange Paths	Checking if there are alternative routes in case a route is outdated
Accuracy of Prices	Checking prices from the market APIs directly
General Practicality	User feedbacks



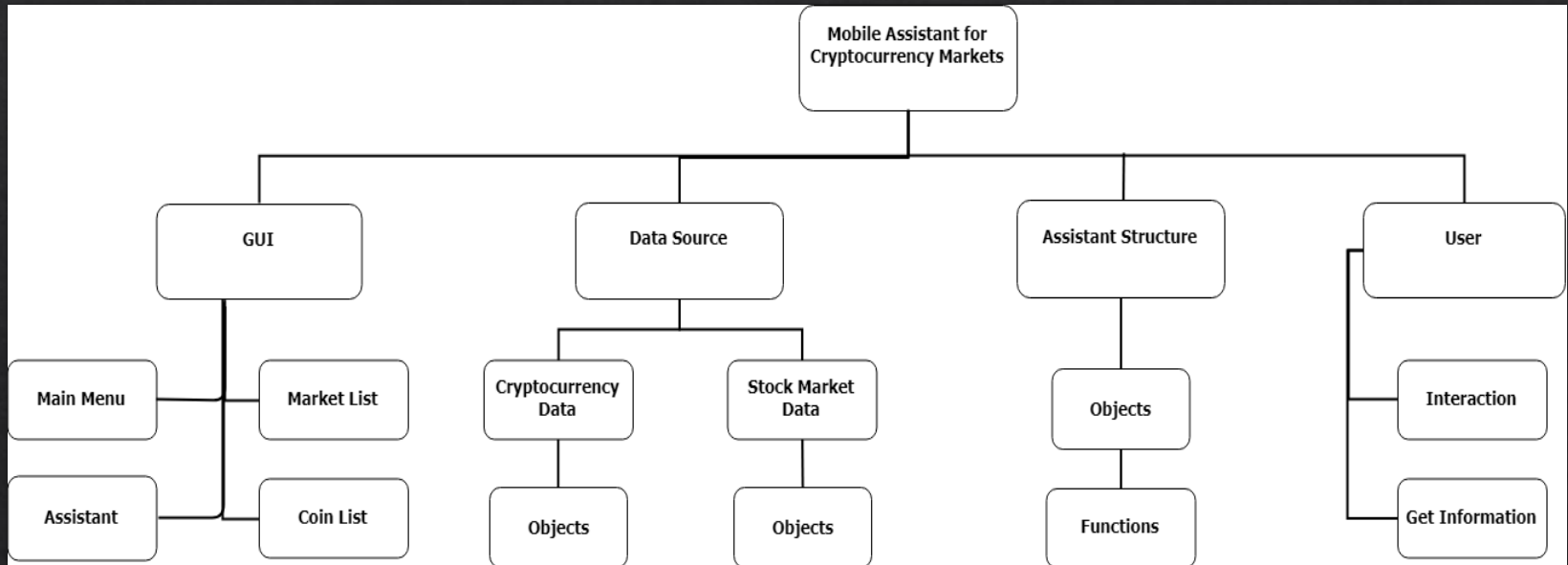
# Workplan

	24-30 September	1-7 October	8-14 October	15-21 October	22-28 October	1-4 November	5-11 November	12-18 November	19-25 November	26-30 November	3-9 December	10-16 December	17-23 December	24-28 December	1-6 January
Start Date:25.09.20018	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15
Project Proposal Form	TEAM														
Project Selection Form/ GitHub		TEAM													
Project Work Plan			TEAM	TEAM											
Literature Review					TEAM										
Software Requirements Specification						TEAM	TEAM	TEAM	TEAM						
Project Webpage										TEAM					
Software Design Description											TEAM	TEAM			
Project Report													TEAM	TEAM	
Presentation															TEAM

# Materials and Methods



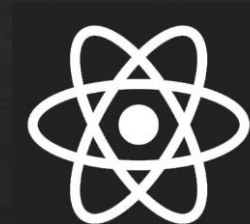
# Solution



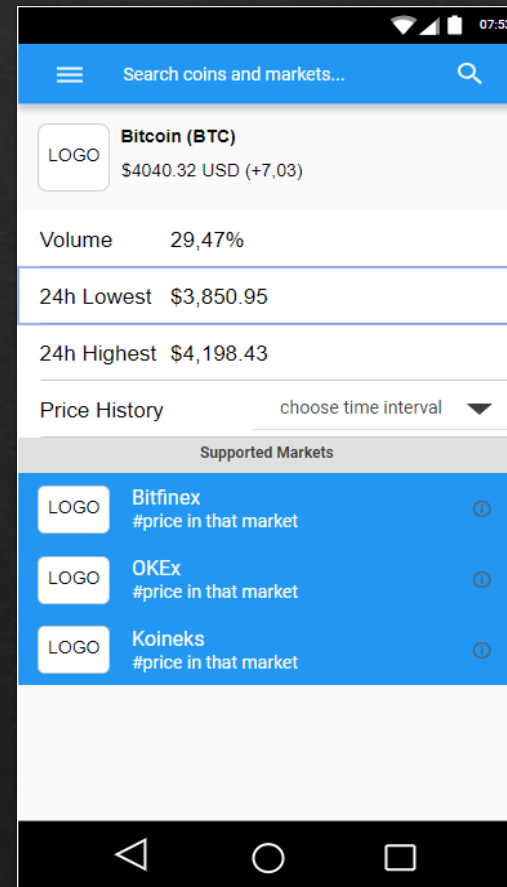
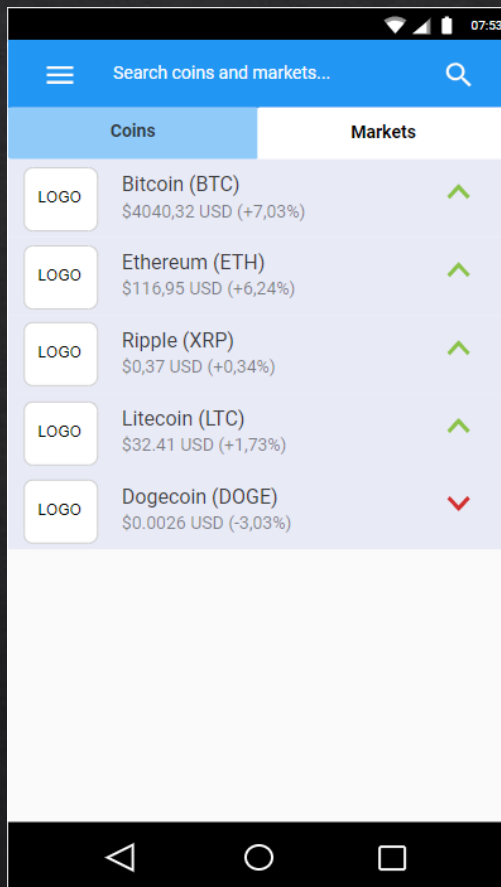
Building an application that assist users by providing updated values and exchange chains of cryptocurrencies.

# Environment and Tools Planned to be Used

- ◇ Android Studio
- ◇ NodeJS
- ◇ React Native
- ◇ Atom.io

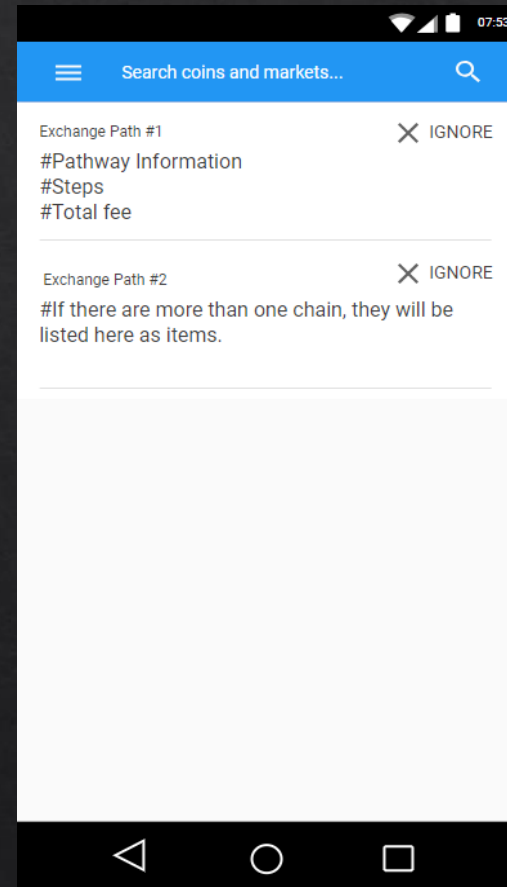
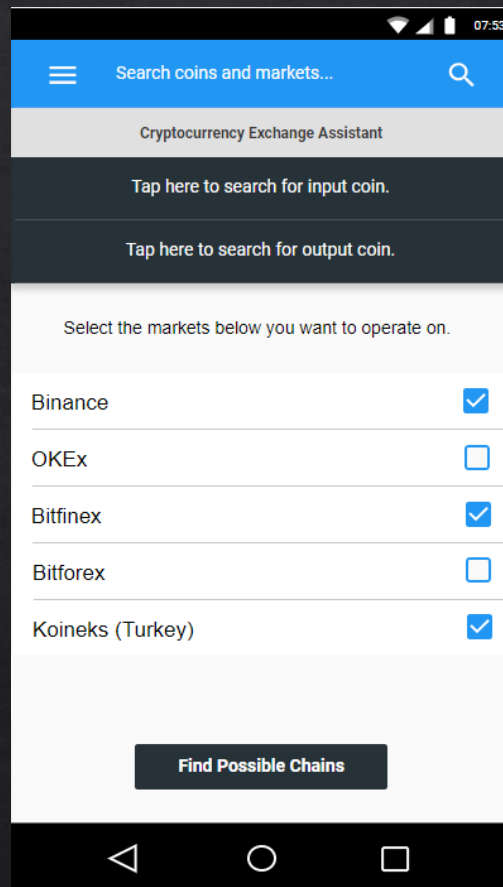


# Design Concept





# Assistant Design Concept



# Results and Conclusions

- ◆ Giving a simple and effective application for cryptocurrency and stock market enthusiasts
- ◆ Bringing the chance to search through coins and markets easily
- ◆ Assisting the users with giving them exchange paths for a coin pair

# Thanks for listening!

## Questions?