

Team Nahasapeemapetilon -- The End

SoftDev pd07

2019-01-07

Roles

Adil Gondal - Prime Minister

Amit Narang - Chief Justice of India

Rubin Peci - Minister of Defense

Qian Zhou - Minister of Home Affairs

CryptUwU - Cryptocurrency Forum

Components:

Front End:

Foundation: Make page look nice; allows dropdowns so that less space may be needed and facilitate navigation

APIs:

Nomics, provide current/historical data for cryptocurrencies; to be displayed in CHARTS page

Plotly, helps display data in the form of a chart

Libraries:

json, turn strings into dictionaries, allow for parsing through data

Flask, create page

urllib, retrieve info from urls

time, creates timestamp

sqlite3, database

passlib, hashing passwords

plotly, generates a graph

pandas, simplifies manipulation of data

util

crypto.py, connects with nomics api and retrieves appropriate data; displays list of information

uses urllib, json;

graph.py, uses information given by crypto.py to generate graphs for visual representation

uses json, plotly, and pandas

dbEditor.py manages database interactions functions, such as:
forum functions: making a thread and replying to a thread,
upvote, preparing data for display in forum.html and thread.html
user function: such as login verification, register
account, and deal with posts/comments/votes that user has made,
load notifications in profile.html;
uses sqlite3, passlib, time;

data

base.db, contain user tables login, user_posts,
user_threads, user_notifications; thread tables threads,
thread_id; coin tables coins

templates

layout.html, base page to be extended
home.html, home page; displays links to forum; nav-bar to be
extended
profile.html, profile page; log-in only; uses dbEditor.py to
generate; displays user threads, posts, and notifications
register.html, allows user to register
forum.html, displays the threads for each subtopic of a topic;
uses dbEditor.py to generate
thread.html, displays particular thread; dbEditor; allows upvote
and comment (adding posts)
coins.html, information about major cryptocurrencies; uses
crypto.py to generate
chart.html, displays graph, uses graph.py
prices.html, allows user to choose coin and start/end dates for
chart.html
exchange.html, allows user to choose exchange, and then market
for chart.html

app.py

root: display home.html; calls on crypto.py

User functions:

auth: authenticates with dbEditor.py, redirects to profile

load_profile: loads profile.html, with displayed notifications
and the posts user contributed to, threads user started

register_page: loads register.html

logout: logout, redirect to home

register_auth: authenticates registration w/ user.py, (yes: root, no: register_page)

Forum functions:

load_forum: loads forum.html, gets request (topic), w/ dbEditor

make_thread: adds a thread to forum, redirects to load_forum

load_thread: loads thread.html, gets request (id), with dbEditor.py; POST: handles upvote w/ dbEditor

addpost: adds a post, uses forum.py (redirect: forum)

API functions:

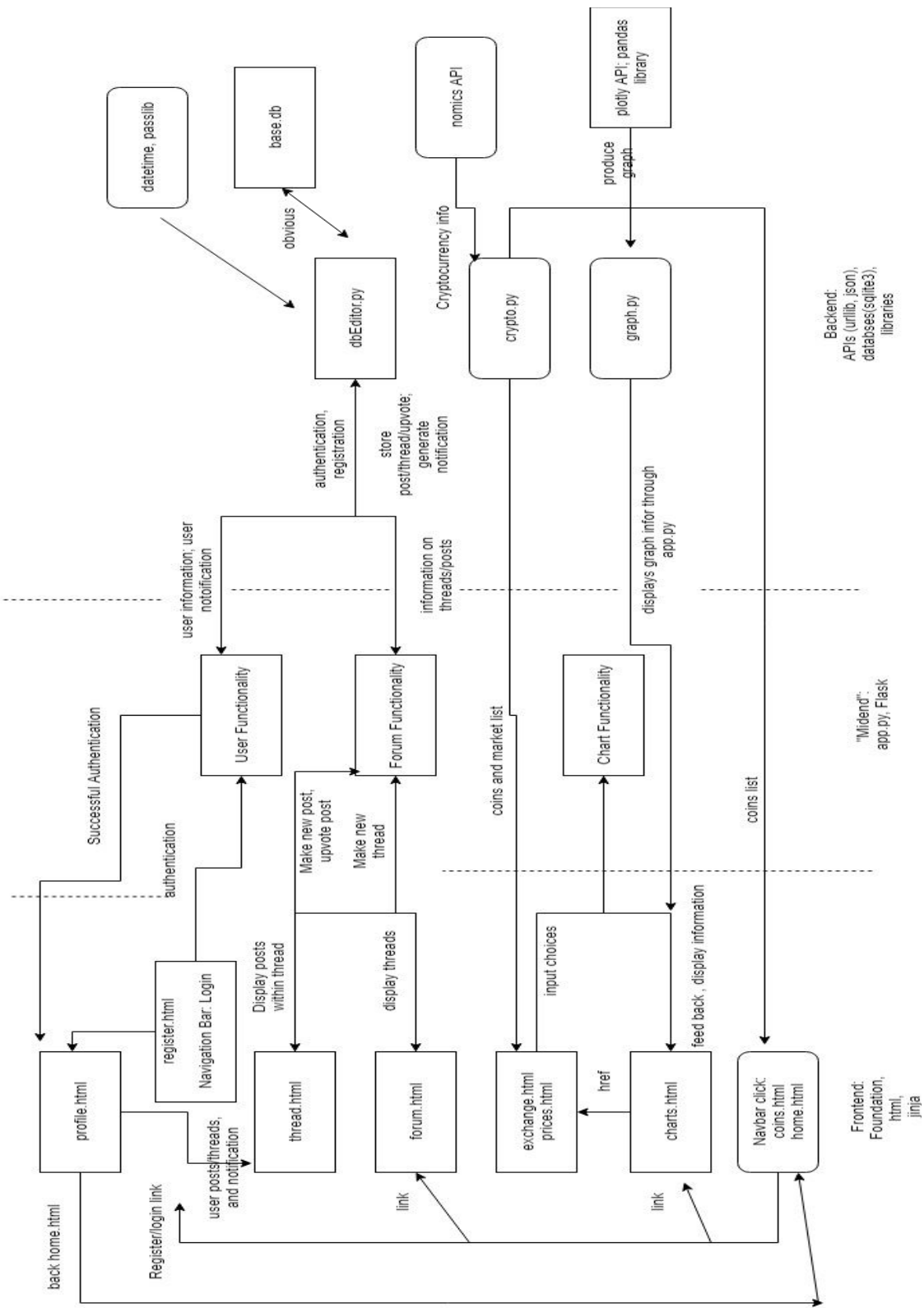
chart: loads charts.html, displays relevant chart data. uses graph.py

coins: loads coin data, uses crypto.py

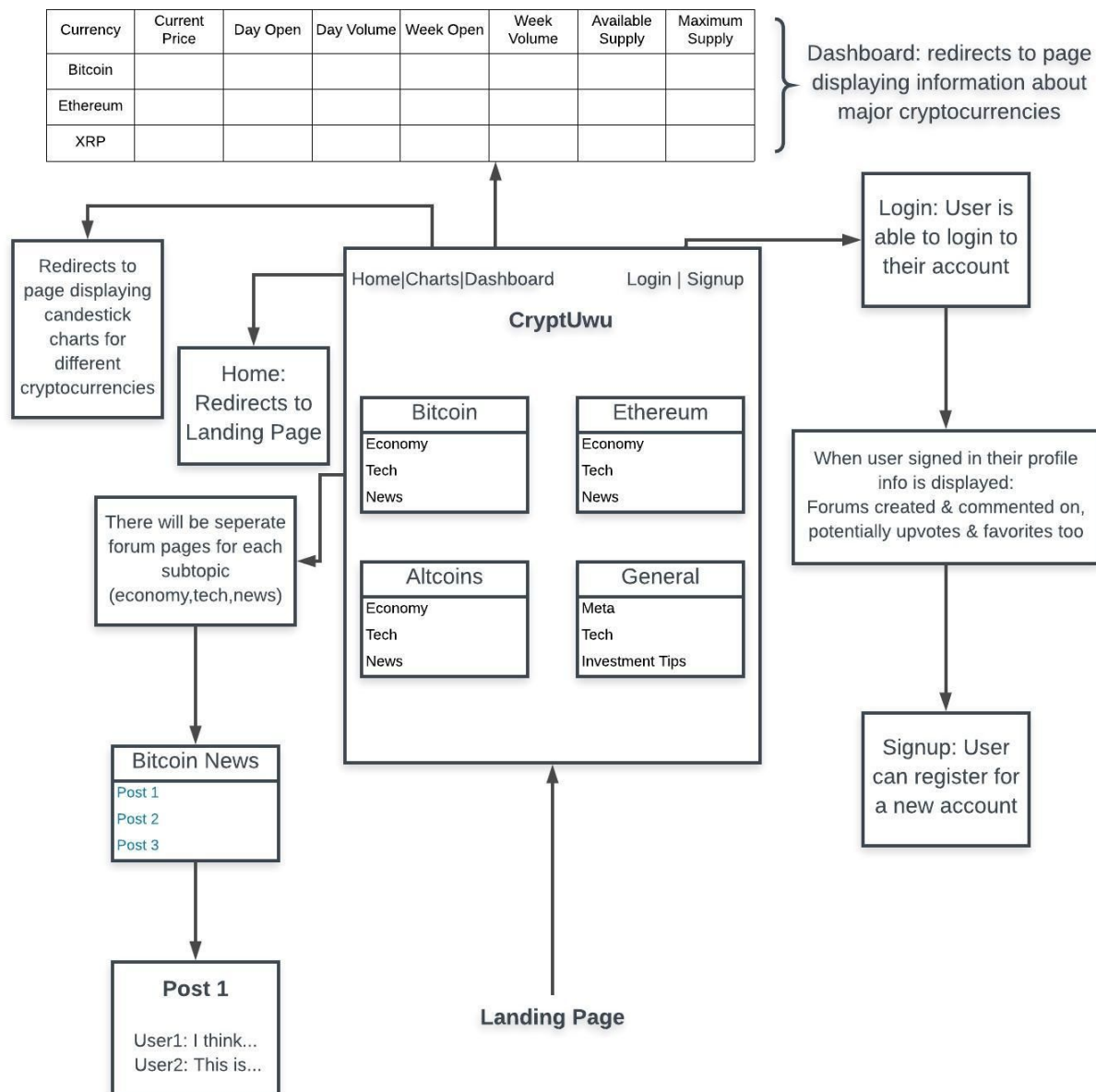
prices: get list of coins for prices to be displayed in charts.html, uses crypto.py

exchanges: allows user to pick exchange and view market on that exchange to be displayed on charts.html, uses crypto.py

Component Map:



Site Map:



Database Schema:

Login

Username (String)	Hashed password (String)
"rpeci"	90281u3hojkasjsa

Coins

Username	List of Coins
rpeci	BTC, ETH , CCR

Threads (stores all the threads)

ID (int)	Topic (String)	Post(string)	user(string)
1	btc_news	"I love bitconnect!"	rpeci

rpeci_threads (repeat for all users)

ID(int)	POST (string)
1	"I love bitconnect!"

rpeci_posts (repeat for all users)

Thread ID (int)	Post ID (int)	Post (string)
23	2	"I still love bitconnect!"

User Notifications

User(string)	Action (string)	ThreadID (int)	PostID (int)	Read (int)
rpeci	Read	7	5	1

thread# (repeat for all threads)

PostID (int)	Post (string)	User (string)	Time-stamp (string)	Upvotes (int)	whoVote (int)
1	"I love bitconnect!"	rpeci	2018-01-07 :13:15	100	0

Task Delegation:

Adil Gondal

- Setup login system using passlib to hash and salt passwords
- Oversee the project and make changes as necessary
- Public relations

Amit Narang

- Work on database for forum and user functions

Rubin Peci

- Utilize the Nomics API to get accurate crypto-market information to display to users
- Utilize Plotly API to display aforementioned information in charts
- Work on html and app.py for cryptocurrency functions

Qian Zhou

- Work on html and app.py for forum and user (frontend)