

Pro View

System Design Document

CSCC01

Group: Pro-Group

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Front End CRC Cards:

Card 1	
Component: Login Page	
Place: \frontend\src\components\Login.js	
Parent Class: None SubClass: None	
Responsibilities: Allow the user to register a new email and password. It also provides users some feedback about the current process.	Collaborator: Edit Text, Button

Card 2	
Component: Navbar	
Place: \frontend\src\components\NavBar\NavBar.js	
Parent Class: None SubClass: None	
Responsibilities: Show the dropdowns. Allow users to navigate between different pages.	Collaborator: StockPage,Clock, Trade, View, Button

Card 3	
Component: Register Page	
Place: \frontend\src\components\Register.js	
Parent Class: None SubClass: None	
Responsibilities: Allow users to register to register an account. It also reminds users when they type an invalid input.	Collaborator: Login, Stock, Button

Card 4	
Component: Clock	
Place: \frontend\src\components\Clock.js	
Parent Class: None SubClass: None	
Responsibilities: Show different time zone times. Users can also set the alarm to remind them.	Collaborator: Alarm

Card 5	
Component: Currency	
Place: \frontend\src\components\Login.js	
Parent Class: None SubClass: None	

Responsibilities: Show the current exchange rate. It also allows users to exchange currency online.	Collaborator:
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Card 6	
Component: Chatbox	
Place: \frontend\src\components\chatBox.js	
Parent Class: None SubClass: None	
Responsibilities: Allow users to chat with other users among their friend list. Users also can send image or their balance record through this page	Collaborator: Edit Text

Card 7	
Component: Trade	
Place: \frontend\src\components\Trade.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to trade stocks. It also shows users the remendations.	Collaborator:

Card 8	
Component: View	
Place: \frontend\src\components\View.js	

Parent Class: None SubClass: None	
Responsibilities: Show users the image and their different stock status.	Collaborator:

Card 9	
Component: Button	
Place: \frontend\src\components\Button.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to interact with the website by clicking.	Collaborator:

Card 10	
Component: Edit Text (password box etc)	
Place: \frontend\src\components\editText.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to input information through the input box.	Collaborator:

Card 11	
Component: Stock	

Place: \frontend\src\Stock.js	
Parent Class: None SubClass: None	
Responsibilities: It shows the stock graph on the page. Besides, users can also zoom in or out on the graph.	Collaborator:

Card 12	
Component: Sidebar	
Place: \frontend\src\components\SideBar	
Parent Class: None SubClass: None	
Responsibilities: It allows users to switch to different pages by clicking different buttons.	Collaborator: SidebarOption.js

Card 13	
Component: Drawing panel	
Place: \frontend\src\components\drawingPanel.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to draw on the panel. The drawing panel is the same as the stock panel.	Collaborator: Stock

Card 14

Component: Hotlist	
Place: \frontend\src\components\Hotlist.js	
Parent Class: None SubClass: None	
Responsibilities: It displays 20 hot stocks and users can view stock's details by clicking the buttons.	Collaborator: button, header

Card 15	
Component: Alarm	
Place: \frontend\src\components\Alarmpage.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to set alarms on the website. Users can also change the alarm setting on this page.	Collaborator: button, selectors

Card 16	
Component: Paper Trading	
Place: \frontend\src\components\PaperTrading.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to manipulate the virtual transaction to practice their skill.	Collaborator: button

Card 17	
Component: Watchlist	
Place: \frontend\src\components\WatchList.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to add stock to their personal watchlist so that they could view the chosen stocks on the home page.	Collaborator:

Card 18	
Component: StockFeed	
Place: \frontend\src\components\StockFeed.js	
Parent Class: None SubClass: None	
Responsibilities: Used to show the main page of the stock, contains watch list and corresponding stocks.	Collaborator: WatchList and Stock

Card 19	
Component: Community	
Place: \frontend\src\components\Community.js	
Parent Class: None SubClass: None	
Responsibilities: show users the page that can join an existing group.	Collaborator: Button, Edit text

Card 20	
Component: GroupTag	
Place: \frontend\src\components\GroupTag.js	
Parent Class: None SubClass: None	
Responsibilities: Show information of a Group, it's name and a button to chat.	Collaborator: none

Card 21	
Component: GroupList	
Place: \frontend\src\components\GroupList.js	
Parent Class: None SubClass: None	
Responsibilities: Show all Groups in the database, used in GroupPage.	Collaborator: GroupTag

Card 22	
Component: GroupPage	
Place: \frontend\src\components\GroupPage.js	
Parent Class: None SubClass: None	
Responsibilities: allow user to chat in a group, use GroupList to show all groups and chatBox to chat.	Collaborator: GroupList, ChatBox

Card 23	
Component: AvatarUpload	
Place: \frontend\src\components\AvatarUpload.js	
Parent Class: None SubClass: None	
Responsibilities: allowed user to upload a avatar to the database, use FileBase64 library	Collaborator: None

Card 24	
Component: Profile	
Place: \frontend\src\components\Profile.js	
Parent Class: None SubClass: None	
Responsibilities: it contains user info part and avatar part and use and set their profile on this page.	Collaborator: AvatarUpload, ProfileUpdate

Card 25	
Component: ProfileUpdate	
Place: \frontend\src\components\ProfileUpdate.js	
Parent Class: None SubClass: None	
Responsibilities: it allow user to submit new username, new biology, new phone number and reset password.	Collaborator: Profile

Card 26	
Component: News item	
Place: \frontend\src\components\Newsitem.js	
Parent Class: None SubClass: None	
Responsibilities: Show a financial news that can help users get the reference to make the decision.	Collaborator: Text, Image, Link

Card 27	
Component: TutorialPage	
Place: \frontend\src\components\TutorialPage.js	
Parent Class: None SubClass: None	
Responsibilities: Provide users concept of stock and stock market. Teach users how to use our website to add stock to their personal watchlist and do paper trading.	Collaborator: None

Card 28	
Component: News page	
Place: \frontend\src\components\News.js	
Parent Class: None SubClass: None	

Responsibilities: Show the recent financial news in an appealing page to help users to make their decision. It will also update everyday.	Collaborator: News item, Text
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Backend CRC Cards

Card 1	
Component: User list	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It sends user information they searched on the search page.	Collaborator:

Card 2	
Component: Register	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to register an account. It also send the feedback if any error occurs	Collaborator:

Card 3	
Component: Login	
Place: \backend\controllers\auth.js	

Parent Class: None SubClass: None	
Responsibilities: It allows users to login. Users can also switch to reset the password on this page.	Collaborator:

Card 4	
Component: Logout	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to logout by clicking the logout button on the sidebar.	Collaborator: Sidebar

Card 5	
Component: Profile	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to see the profile by clicking the profile button on the sidebar.	Collaborator:

Card 6

Component: database_connect	
Place: \backend\db\connect.js	
Parent Class: None SubClass: None	
Responsibilities: store the data	Collaborator: User

Card 7	
Component: User	
Place: \backend\models\User.js	
Parent Class: None SubClass: None	
Responsibilities: formalize the user information	Collaborator: database_connect

Card 8	
Component: reset_password	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It helps users to reset the password.	Collaborator: database_connect

Card 9

Component: find_friends	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It helps users to search for other users stored in the database.	Collaborator: database_connect

Card 10	
Component: find_friend_in	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to receive adding friend request.	Collaborator: database_connect

Card 11	
Component: find_friend_out	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It allows users to send adding friend requests.	Collaborator: database_connect

Card 12	
Component: add_friends	
Place: \backend\controllers\auth.js	

Parent Class: None SubClass: None	
Responsibilities: It is a request from other users to add them to their friend list.	Collaborator: database_connect

Card 13	
Component: accept_friend	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It helps users to accept the request to add a friend.	Collaborator: database_connect

Card 14	
Component: reject_friend	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It helps users to reject the friend request on their friends page.	Collaborator: database_connect

Card 15	
Component: add_to_personal_watchlist	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	

Responsibilities: It helps users to add their favorite stock to personal watchlist.	Collaborator: database_connect
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Card 16	
Component: get_watchlist	
Place: \backend\controllers\auth.js	
Parent Class: None SubClass: None	
Responsibilities: It helps to get information from users watchlist.	Collaborator: database_connect

Card 17	
Component: getMsg	
Place: \backend\controllers\msg.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the users to get chat messages.	Collaborator: database_connect

Card 18	
Component: sendMsg	
Place: \backend\controllers\msg.js	
Parent Class: None SubClass: None	

Responsibilities: It helps the users to send chat messages.	Collaborator: database_connect
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Card 19	
Component: createGroup	
Place: \backend\controllers\group.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the users to create a group chat.	Collaborator: database_connect

Card 20	
Component: addMember	
Place: \backend\controllers\group.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the users to add group member to a group chat.	Collaborator: database_connect

Card 21	
Component: getMember	
Place: \backend\controllers\group.js	
Parent Class: None SubClass: None	

Responsibilities: It helps the users to get a group member.	Collaborator: database_connect
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Card 22	
Component: buyStock	
Place: \backend\controllers\stock.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the users to use fake money to buy a stock.	Collaborator: database_connect

Card 23	
Component: getBalance	
Place: \backend\controllers\stock.js	
Parent Class: None SubClass: None	
Responsibilities: It helps users check whether they have made or lost money on paper trading.	Collaborator: database_connect

Card 24	
Component: updateAvatar	
Place: \backend\controllers\profile.js	
Parent Class: None SubClass: None	

Responsibilities: It helps users to upload their avatar to the database.	Collaborator: database_connect
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Card 25	
Component: getAvatar	
Place: \backend\controllers\profile.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the website to get avatar from database	Collaborator: database_connect

Card 26	
Component: getAvatar	
Place: \backend\controllers\profile.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the website to get avatar from database	Collaborator: database_connect

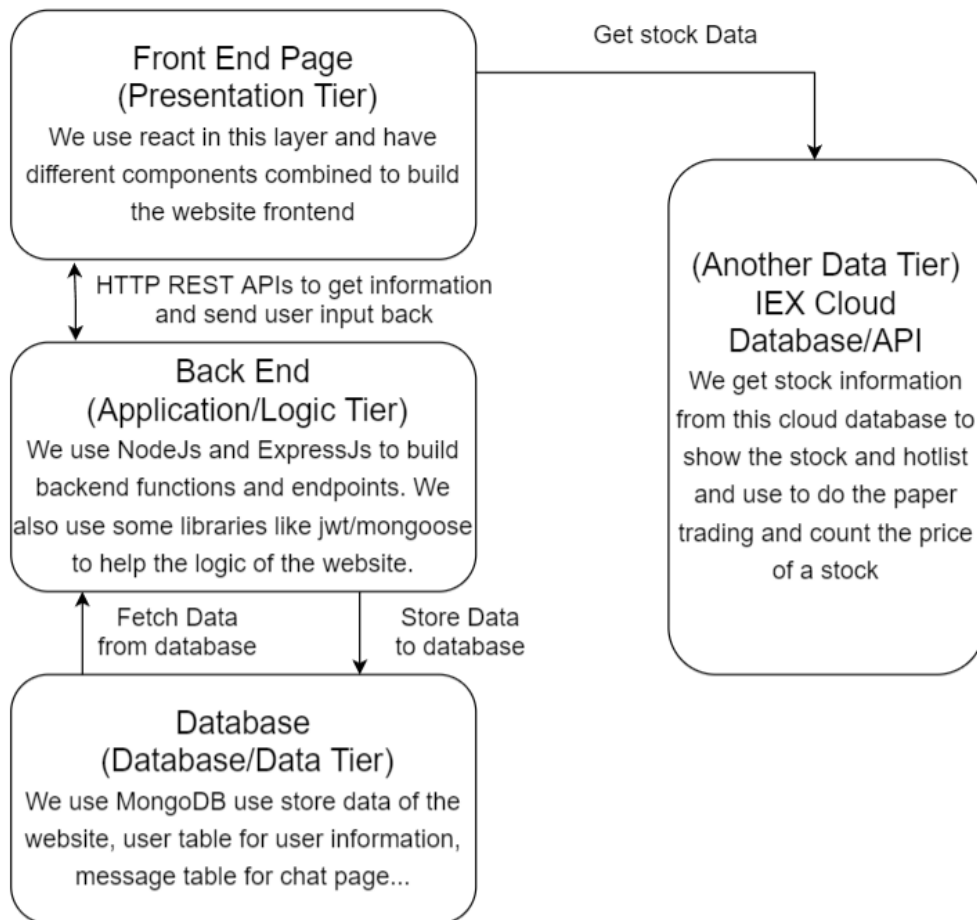
Card 27	
Component: sellStock	
Place: \backend\controllers\stock.js	
Parent Class: None SubClass: None	

Responsibilities: It helps the users to sell the stock	Collaborator: database_connect
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Card 28	
Component: getHistory	
Place: \backend\controllers\stock.js	
Parent Class: None SubClass: None	
Responsibilities: It helps the users to get trading history	Collaborator: database_connect

System architecture

System Architecture Diagram: Three Tier Architecture



Reference: <https://www.ibm.com/cloud/learn/three-tier-architecture>