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CPP Sync
Alumni Connections – We Connect YOU

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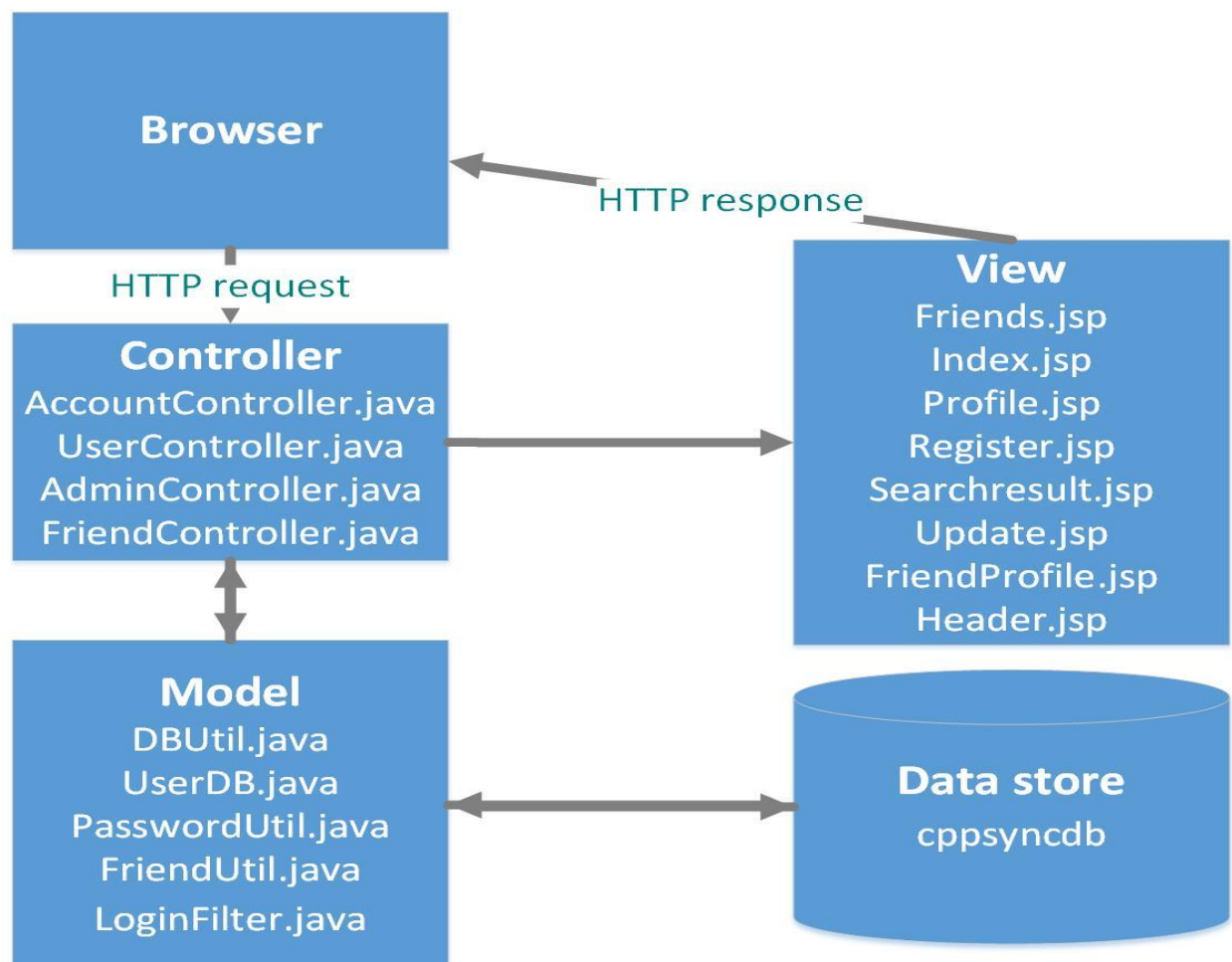
CPP Sync

Alumni Connections – We Connect YOU

CPP Sync is an alumni networking site developed with the intent of connecting all of the alumni's, faculties, and students of Cal Poly Pomona. This report will explain the inner workings/operations of the site so that it can be used as a reference by developers working on CPP Sync in the future.

MVC Diagram

Programs

JSP:

Header:

The header JSP contains the search box, as well as tabs that links the user to the profile, account update and friends JSP pages. Depending on whether or not the user who logged in is an admin the admin tab may be visible as well. The header the JSP page is also included in the profile, search result, update and admin JSP pages. It is the only JSP that interacts with all of the Servlets (Account, Admin, User, and Friend Controllers).

Index:

The index page is just a typical login page with a place for the user to input their email and password if they want to login. It also gives the user the option to sign up as well. Here parameters are sent to the User Controller or the user is redirected to the register JSP page.

Register:

The register page is also a typical register page that gives the user the option to register for an account if they do not have one. After the user completes the form and hit submit the parameters entered are passed to the User Controller as a post

Admin:

The admin JSP is only accessible if the user is an administrator. This is a value set in the database. On this page the administrator is given the option to terminate other user's accounts from the database as well as change their password. A post request would be sent to the Admin Controller Servlet.

Friends:

On the Friends JSP, the user is allowed to check the requests they have received from other members and either accept or decline them. Whether or not the user accepts or declines the request, a post method is sent to the Friend Controller Servlet.

Profile:

The Profile JSP page doesn't actually take any users input so it doesn't send a request to any of the Servlets. However, data is passed to this JSP after certain actions such as when the user logs in data is sent from the User Controller to the profile page.

Search Result:

The Search Result JSP, is the page the user gets to after they enter parameters into the search fields in the header JSP page. When redirected to the Search Result JSP other users are displayed and the user is given the option to send these users a friend request. If they do send a request, the requested user's email is passed as a post method to the Friend Controller Servlet.

Update:

The update JSP page is where the user is given the option to make changes to the info that they entered when registered as well as add additional information to their account info. This JSP page can send a post request to either the User Controller or the Account Controller.

Servlets:

Account Controller:

The account controller Servlet acts as an intermediary between the aforementioned JSP files and the other classes in the program. It usually deals with updating of a user's account info so it is tied mostly with the update the JSP page. Here the servlet gets the parameters and sends it along to the UserDB file where queries are executed to insert and update info on the user. Depending on certain circumstances it also uses the PasswordUtil if the situation calls for checking the password strength and validity as well as making use of the User and Education java classes.

Admin Controller:

Admin Controller is responsible for most or all of the actions taken by a administrator. Such as when the admin deleted a user's account or changes a user's password. If either of these are done, the Admin Controller would access the UserDB to carry out the admins requests. The Admin controller also can send parameters to PasswordUtil if needed or make use of the User or Admin java classes.

Friend Controller:

The only purpose of the Friend Controller is to take care of request sent by the Search Results JSP page. Here the Friend Controller passes parameters from the Search Results to the UserDB where certain queries are executed to send the users friend request to another user. It also makes use of the Search and User classes

User Controller:

The User Controller handles a few different JSP pages, such as the index, register and update. It handles the user's login, registrations as well as the user's entered search criteria's and uploaded images. These parameters are sent to methods in the UserDB where they can perform needed actions. Additionally this Servlet also has accesses the constructors in the User, Education and Search java classes when needed.

Classes:

The Admin, Education, Friend, Search and User java classes just has a great deal of get and set methods as well as constructors for object initializations and or creations to help in the operability of the programs.

Database

Database EER Diagram
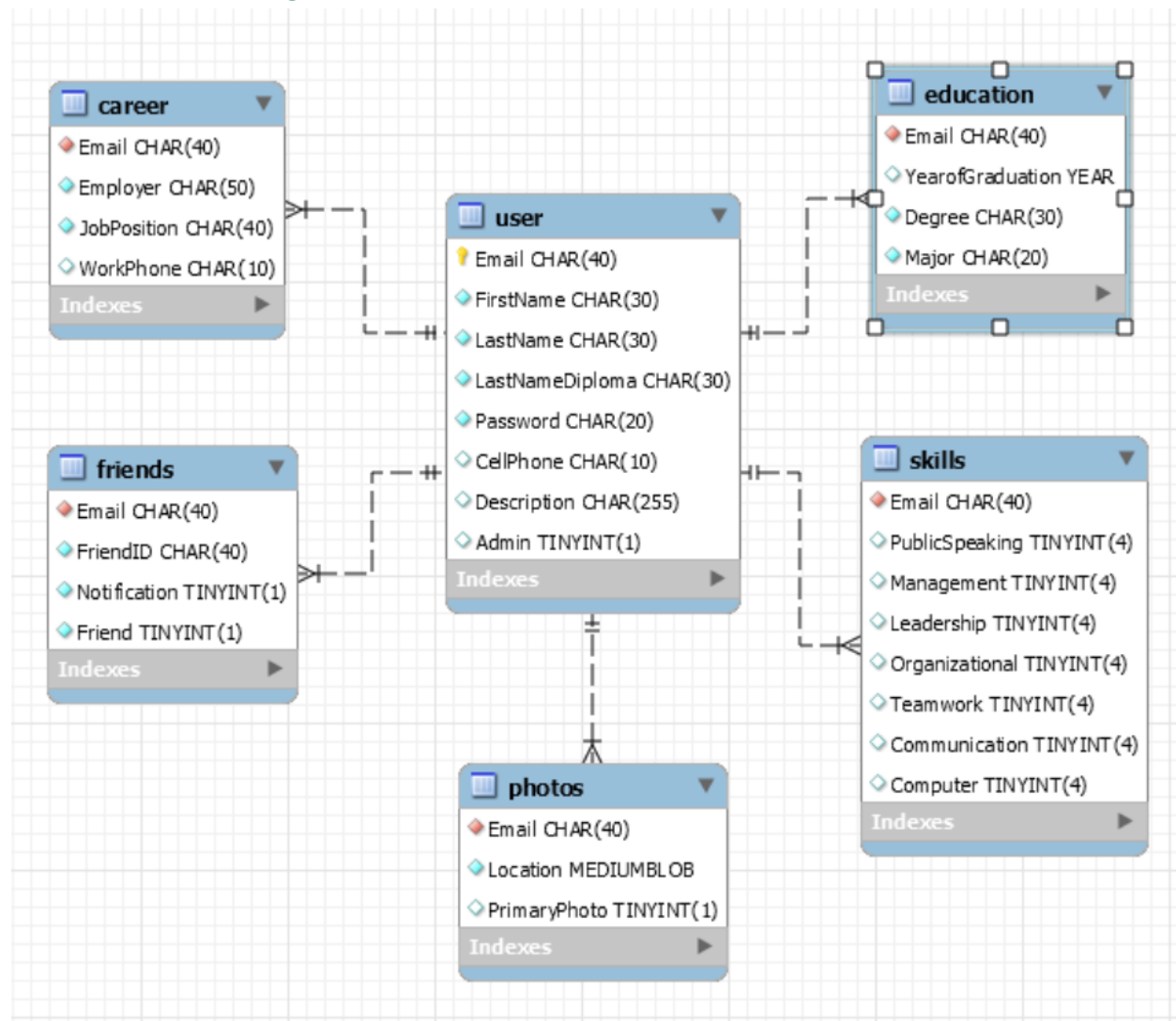
Member's Contributions

Albert Chan:
- Implement File Structure MVC Pattern
- Setup Class and Method separation
- Setup Security/Password filter checks
- Worked on Admin
- Worked on Login/Register
- Worked on Update Account
- Worked on Friend Request/Response
- Quality Assurance for functionality and User Experience (UX)

ZeXing Guo:
- Designed MVC Pattern
- Designed a Web UI
- Worked on Login/Register
- Worked on Update Account
- Worked on Friend Request and Displaying Friend Profile

Anderson Lam:
- Designed the whole Database Schema and the Database EER Diagram
- Worked on the Search Function
- Worked on the early stages of the profile page
- Worked on some of the SQL Queries used in the UserDB class
- Made changes to the Database structure and datatypes over time and keeping it updated
- Worked on uploading photos