**Team Name: MediFind**

**Team Members: Amala Joshy, Rucha Damle,David Agumya, Jenny Wu**

**Did you fulfill your value proposition?**

The value proposition was "*MediFind is a data driven web application with category based searches about health care facilities for users who are unhappy with the lack of collective information available on health care*." By category based searches we envisioned users being able to search based on several criteria. This criterion is zip code, healthcare facility type (Hospital, Pharmacy, Clinic) and insurance provider. The user's zip code is used as the default search parameter when the user logs in, however the user can input a zip code and use that as a basis for search. The user has three options for the healthcare facility type. These are hospital, clinic and pharmacy. This allows the user to search specific healthcare categories. The user also has the option of viewing the Healthcare facilities that are within his insurance coverage (Insurance coverage between a user and facility is such that the facility supports the insurance provider the user uses) and those that are out of the user's insurance provider coverage. By giving the user all these options we hope to cater to both the user who wants general information and the user who wants the specific information based on filters.

Furthermore, we made sure to only show relevant information and keep the user interface minimal to reflect our vision of providing the user, the optimum amount of information without overwhelming the user.

**List what you initially planned to deliver (from Milestone 1), and compare to what you delivered.**

| Target Deliverables | Actual Deliverables |
|---|---|
| 1. User Login | 1. User Login |
| 2. MediFind Search Function<br>    a. Zip code<br>    b. Healthcare facility type<br>    c. Insurance provider coverage | 2. MediFind Search Function<br>    a. Zip Code<br>    b. HealthCare Facility Type<br>    c. Insurance provider coverage. |
| 3. Specific information about a chosen Facility.<br>    a. Contact information<br>    b. Hours<br>    c. Appointment Schedule<br>    d. Available reviews and ratings<br>    e. Doctor Information | 3. Specific information about a chosen Facility.<br>    a. Name<br>    b. Owner<br>    c. Address (Contact Information)<br>    d. Parking<br>    e. Hours of Service<br>    f. Rating and Reviews<br>    g. Doctor information |

*Table 1: This shows the objectives set out in the first write up (PM1 -> Target Deliverables) and what we delivered PM6*

We did meet all the intended Deliverables that we set out to deliver. We have a User login page which is the entry point for the web app. Secondly we have also added the ability for a user to register to the platform if they are not already users. Users can also update their personal information on the web app and the changes are propagated to the database.

We have also added the functionality for users to view their appointment schedule which lists the healthcare facility the appointment is at and other related information to that that appointment. The user has the option of cancelling their appointment, from the user profile page.

We have added a search function for users to engage with our database of healthcare providers using various categories such as Zip Code, HealthCare Facility Type, Insurance provider coverage. Based on one or a combination of these criteria, the user can select the appropriate information that they want.

When the user logs in, the first page they see is a home page that displays the healthcare facilities in the same area as the user's zip code, you entered in as a user. This is the default display and here the user can see the details or contact information of the healthcare facility such as the name, and address. The user can get more details about the healthcare facility if they want and these are on another page. On this page the user can view more information on the healthcare facility such as the hours, available parking as well as the rating and reviews which are given by users.

Users can add a review or rating to a healthcare facility. The user can also make an appointment at that health care facility for which the information is shown. Furthermore, the user can view the doctors that are available. To help the user, make the best choice we have also included the specialties of the doctors at the healthcare facilities.

**Your final UML. Include a description of what changed in your UML (including which milestone did you make changes and why)?**

*This was our original UML*
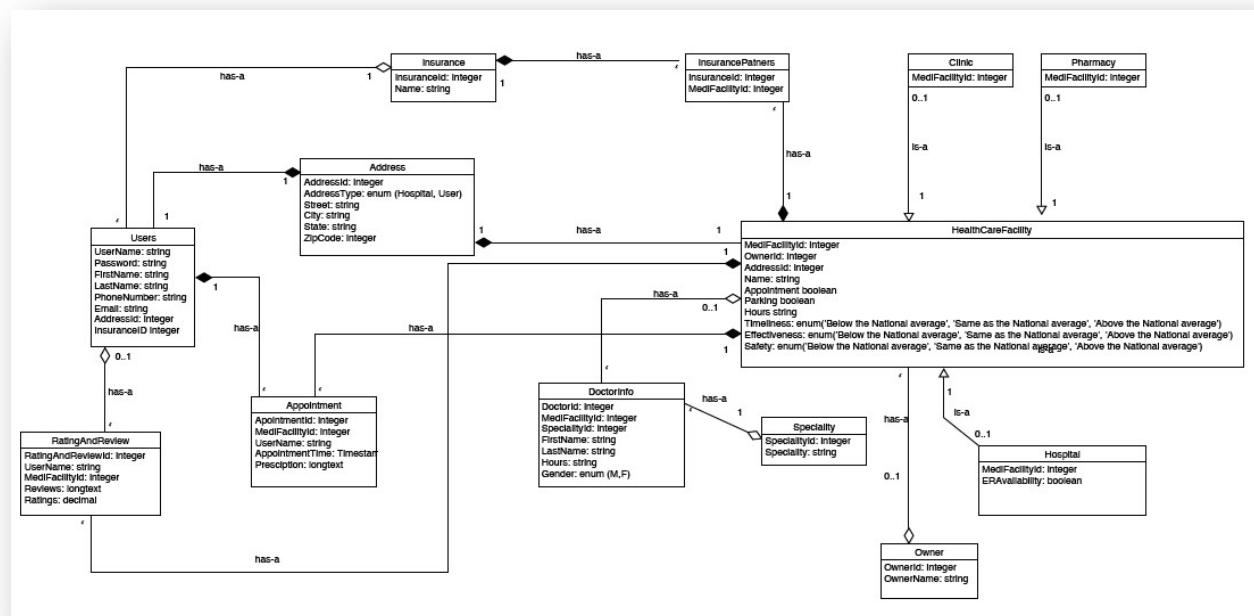


*Figure 1: This is the original UML diagram from PM1*

We did not make any changes to the connections between the tables however we realized that we needed to make the "*Medifacility id*" field in Pharmacy, Clinic, Hospital and Healthcare Facility a unique key in addition to them being primary keys and foreign keys. We did this because we realized, that without that safeguard we could add several duplicate data to these tables.

During the final stages of the projects we have debated removing some field columns in the healthcare-facilities table such as "Timeliness" "Effectiveness" "Safety". This was part of the original data set from which we got information about Health care facilities in the United States however we realize that it is static data that is more subjective than objective, we will consider removing it in future versions.

Otherwise, we did not make any significant changes to our UML design during the course of implementing the project.

**What went well?**

It was easy to find current up to date data on healthcare facilities information for free through the federal government datasets. We managed to each find core strengths that benefited the overall project for example one member became good at writing queries, another member at ETL Clover, another at Web front end design, another at java and jsp. Together we could leverage these Individual strengths to help each other when we were stuck and learn.

The technologies we used enabled us to work remotely with each other. We used a central git-hub repository to keep all our java, and jsp code. Each member then cloned this repo in their Eclipse so that we all have access immediately and any changes are immediately propagated. We also hosted our database on Amazon RDS services. Having a remote database also helped us to work on the same database at the same time. When we could not meet, we communicated through Facebook messenger using its chat and video services. Using RDS, Facebook and GitHub we could all work remotely and be productive after we split roles.
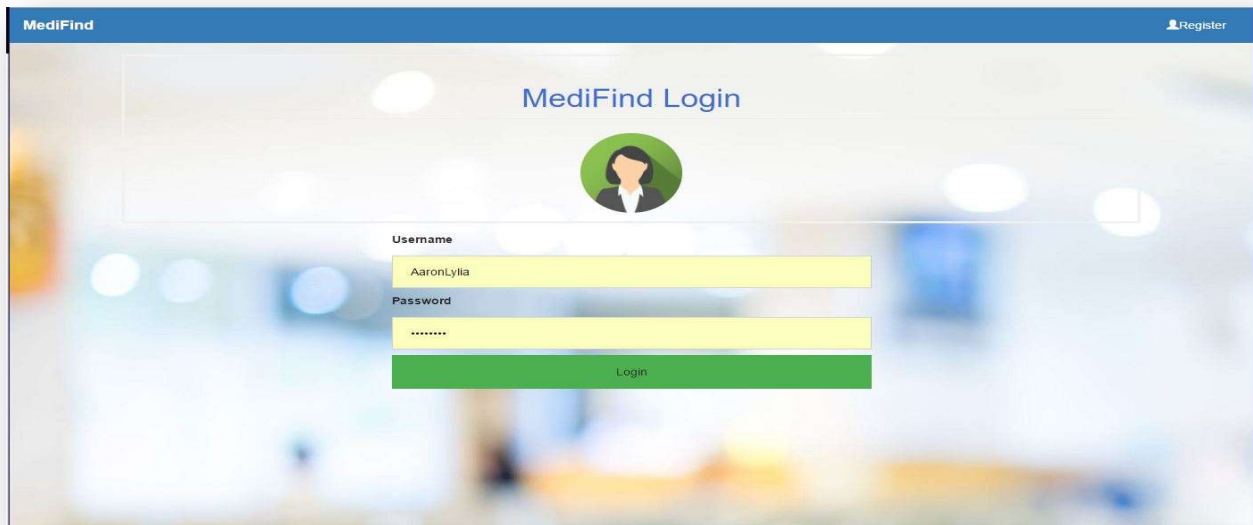
**What would you do differently?**

We could have added other identifiers of healthcare facilities that are quantifiable, we had a problem performing the data analysis because we did not have a lot of quantifiable data in our database to make more interesting comparisons to external data. This caused us to rely heavily on the few quantifiable data we had which was appointments and ratings of healthcare facilities.

We should have taken time at the beginning of the project to all, understand how to use and troubleshoot GitHub conflicts. We lost code, lost hours and peace of mind on git hub issues and could have been more productive had we all mastered GitHub before embarking on the project.
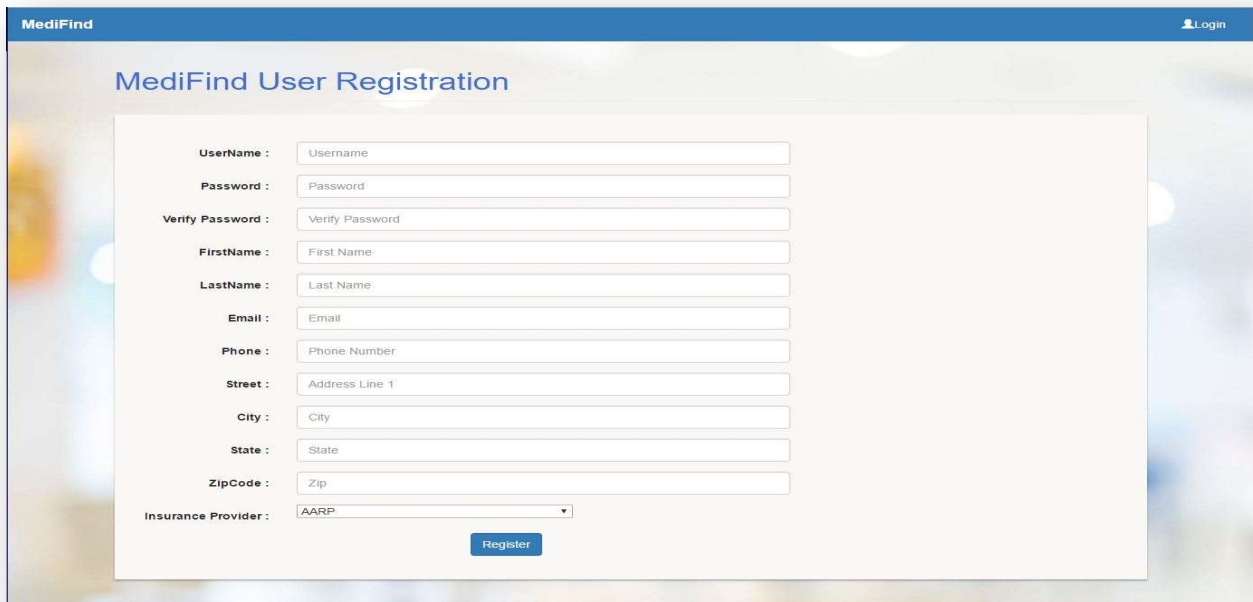
We should have as a team, set aside time each week to meet and work on the project. Without setting a solid and consistent schedule we had some time conflicts that limited how much time we spent working with each other.

## Web App Screens
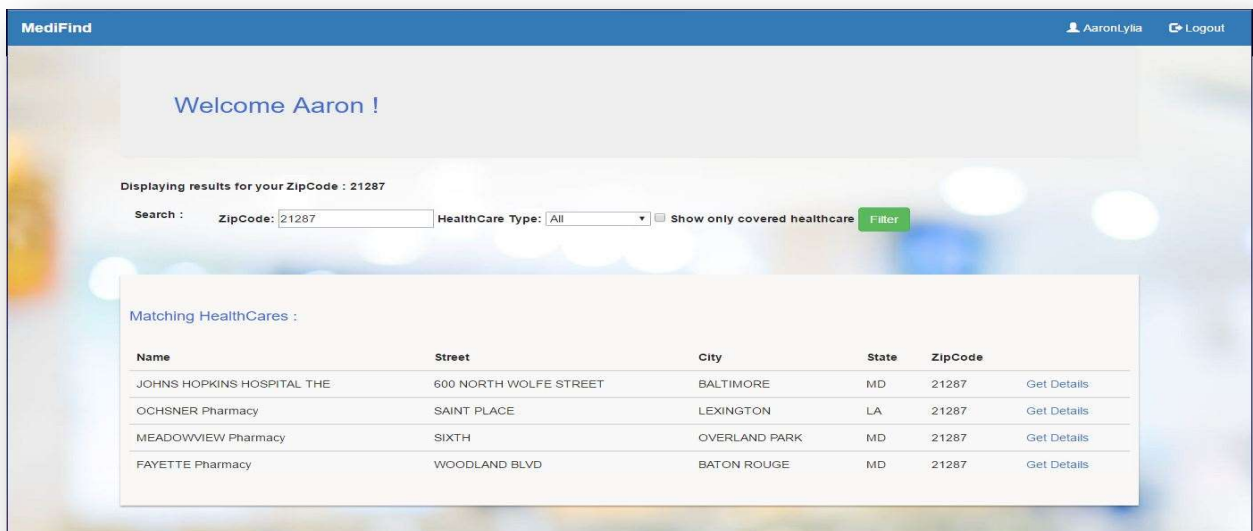


*Figure 2 User Login Screen for users already in the database*

*Figure 3: User Registration Form for new Users*



*Figure 4: After -User Login, General healthcare information in the users - Zip code. If the user wants to use another zip code to search they can enter it in the zip code box, as you can notice the drop-down box with the HealthCare Facility Type is used for specific healthcare facilities.*
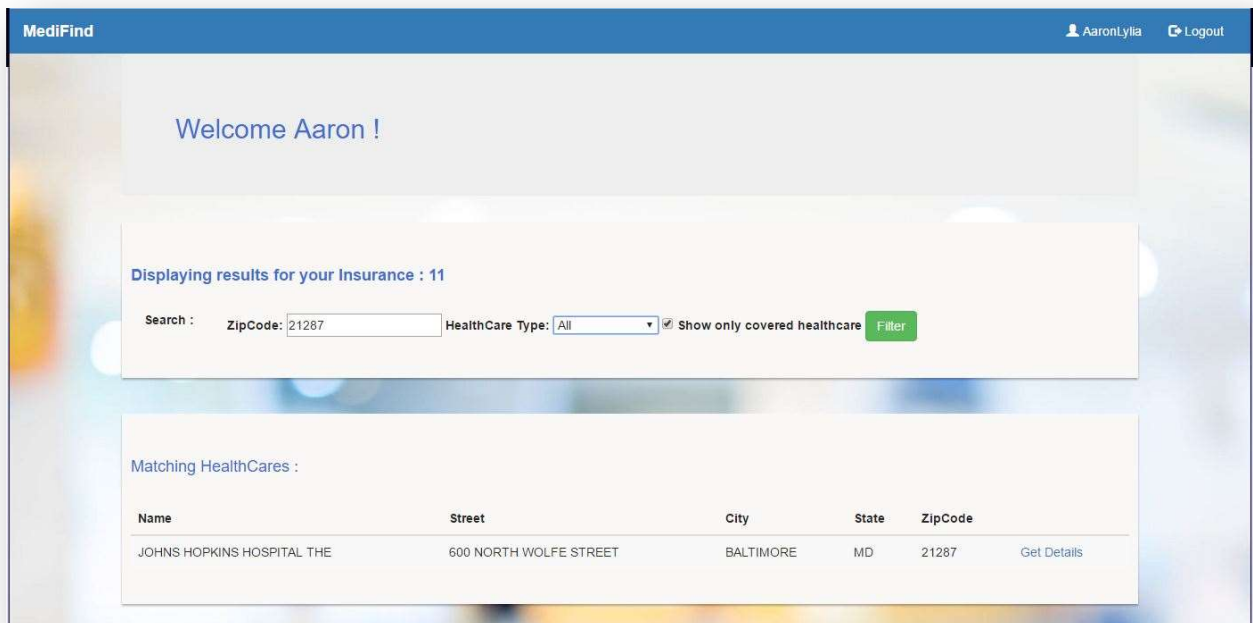
*Figure 5: When the user only wants to view Healthcare Facilities that are within the Users insurance coverage. We use the information the User already provided us with*

*Figure 6: When a user clicks on see details, then view this screen with more healthcare information, with the ability to make a review, appointments at the healthcare facility and doctor available at the health care facility.*



*Figure 7: The User can make a review on a healthcare Facility*

*Figure 8: When a user makes Appointment.*



*Figure 9: The profile page showing the User information. You can also update the User Information*
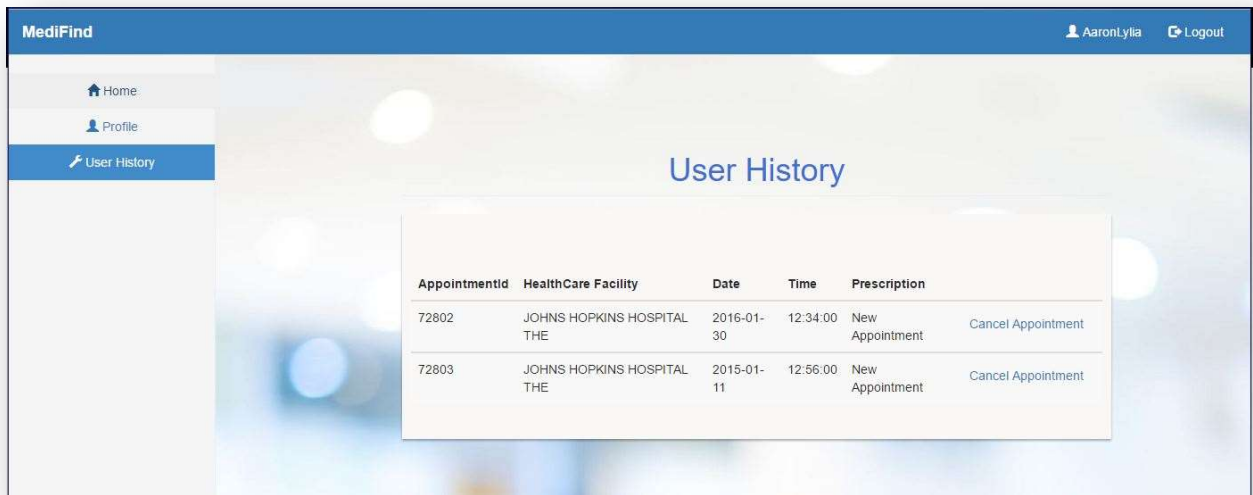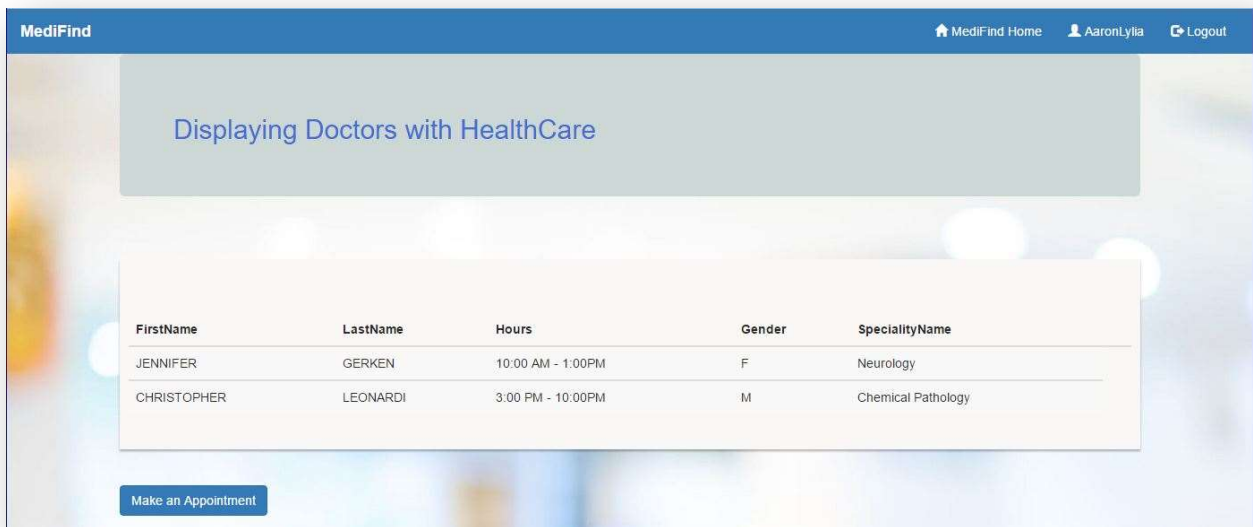
*Figure 10: User History*



*Figure 11: Doctors at a Specific HealthCare Facility*