### Computer Science Group - 38

# CS-230 Software Engineering Assignment Two (A2)

## Contribution Report

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#### Kieran Hodgson

For my contribution to the project, I had created about 95% of the FXML files that have been used. One or two of the FXML files had been created after due to a feature being added or changed which the person making that feature then made the file, but using my base design as to keep uniformity between each FXML files. I created the design .css file as it tells the FXML how they should look. I used scene builder as it allowed for easy creation of multiple looking files and allowed me to locate the properties on them to logical places. Alongside the FXML files, I created the SearchResource java file which was to search the database for each resource that is available and display them, with the user filter them to their needs/wants. To do this I had to have a knowledge of how the application interacted with the database and then retrieve the data from it. This proved quite time consuming as to fully understand the right way to get all the resources in their best descriptions, and then to display them without losing the full aspect of what the resource is. During the group meeting i made sure to try and understand the techniques and terminology people were using as to make sure during the coding phase I wouldn't need much help with knowing what is needed to be done.

#### Scott Ankin

Throughout the implementation of the design I worked alongside my team in order to give new ideas in order to make the implementation as easy and effective as possible, this involved putting forward ideas on how to implement certain features of the application and debugging their code. My main responsibilities while implementing were designing the object classes for the resources such as book, dvd and laptop as well as the design for the subclasses which were used by the resources classes such as the operating system, language and genre and creating their superclass resource. As I was responsible for creating the classes for the the resource object, I also was responsible for implementing the functionality of adding resources and editing resources this involved working with javafx in order to create scenes to allow the user to be able to add information to the database or update the information from the database. As we were using a database to store all of our information. I had to create sql commands which allowed the insertion of data to the database and create queries which allowed tables in the scenes to be populated with data from the database. I also was responsible for allowing the librarian to view an individual resource's borrow history, this was done by populating a table with all the resources and then selecting a single resource which would then open another table on a different scene with the history of who had interacted with that resource and on what date. During group meetings I was open to my groups ideas and made sure that everyone within the group were given an opportunity to speak and put forward their ideas and concerns about the project.

#### Martin Trifonov

For the implementation of the project I worked mainly on the GUI, where I created the initial controllers for the FXML files and setted up the main Application. I created almost all of the linking between scenes. For the functionality of the program I worked on EditAccount, Drawing ( creating a custom avatar), Paying fines , Viewing Transactions and both of the Dashboards. I created the Custom Avatar Drawing scene. I added addition options like colours and size. The saving system saves the drawing as the user id plus .png. While working on paying fines and transaction history I had to fetch data from our database. For

this I had to work with SQL and JavaFX TableViews. During our weekly meeting I was reporting on the process of creating our GUI as well as helping other understand how it works. During the later phases of the project I was helping with code debugging as well as helping getting data to display or getting the input from the user.

#### Mohsen Goodarzi

I have contributed to Thomas Poultney over the coding following the java files:

Database.java, DatabaseConnection.java, DatabaseCommand.java,

SqlLiteDatabase.javaSqlLiteConnection.java, SqlLiteCommand.java,

DatabaseManager.java.

I have done two other classes individually which are DataSet and DatabaseContext which are excluded from project.

I have helped others to write their Database commands and gueries.

I have contributed Martin to coding ViewLendResource.java and ViewReturnResource.java by implementing functionalities like how to populate the table, how to add dynamically an event to the table and etc.

I have helped keiran to implement filtering over his ResearchResource.java.

I have done the final modification over Models.

I helped Thomas Poultney to design his LoginManager class.

I designed and coded the database file.

#### **Daniel Griffiths**

During the implementation of the project I helped with many aspects of the user interface. I figured out how to get data from the database and present it in TableView objects, and helped others to implement TableViews in their classes as well. I created the classes that allow user to view their borrowed resources, their requested resources and their reserved resources, in addition to the class that allows librarians to view overdue books. Furthermore I helped create some of the models and helped others debug their code if the problem related to JavaFx. I also created all the records in the final version of the database for the purposes of testing and presentation in the video. I also put great effort into and created all aspects of the video presenting the functionality of our program and as the video includes all aspects of the software, I also technically was responsible for testing.

#### Thomas Poultney

My contribution to the project consisted of the :Login manager which including functionality so that multiple users can log in if necessary in the future. More importantly this allowed other people to access the user object that is logged into the system from any class so they can retrieve details. I also Helped create the database layer alongside mohsen which included allowing others to execute queries over the database and execute other commands such as insert and update and make a connection to a database. Furthermore, i implemented creating a new user account class and fxml. I then Added functionality to kierans code search resource so that a table row can be selected and it would open up more

details about a resource. This also included editing the view resource model that mohsen created to obtain final functioning search resource. I then implemented the user being able to request a resource which included creating multiple complicated SQL statements. Finally i helped create the database file and update it, to account for changes in schema as we noticed flaws in our initial logic or additional functionality.