Report – Team 50 CSCI-1202 Book Management System Groupwork

Our team project's aim was to apply all the knowledge that was learned in the PP2 course. As team 50, we started to analyze all the requirements and instructions, brainstorming our ideas about the general system logic and code implementation. We tried to apply all the concepts covered in the PP2 course. Besides this, we were instructed to learn JavaSwing libraries in order to create a Graphical User Interface, providing a good interaction between the user and the system. Firstly, we had to build the skeleton of our system, and we achieved it by creating a UML Class Diagram, which provided us with a good visualization of our main points and other details of the expected system. Of course, throughout the process of coding, we made many improvisations and changes in our code structure because all clever ideas do not always align with each other, and we actually realized this during the coding and testing parts. Every time we encountered any bugs or logical errors, we could immediately change it in our UML class, and it really helped us a lot to maintain our discipline, track the progress, and manage the time and work division. All our team members did a good job on this project. Each of us displayed and integrated his or her own problem-solving skills as well as current Java practices and experience. We really enjoyed group discussions, sharing our ideas, and approaching the project from different angles. It also made us go back and revise all the knowledge gained through the semester, starting in week 1. That is why this project is highly loved by our teammates.

Let's talk about each team member's contributions:

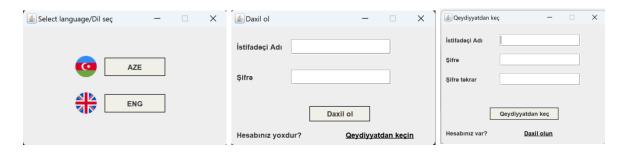
Bilgeyis Muradova mostly worked on GUI classes, successfully connecting the database files with the JavaSwing implementation. She also helped with sorting and filtering, file reading, and database tables, as well as implementing the generics and inheritance concepts and successful exception handling in classes. She detected the problematic parts in the codes with great attention, fixed them successfully.

Jala Almammadli created the UML Class Diagram and updated it throughout the project, meeting the requirements of all the implementations in our codes. She helped with Book and Personal interfaces, sorting, and the general logic of the management system. She created the README part, introducing the main purpose of the software and the installation and usage guide. The report is written by Jala, displaying all the processes and contributions of each member.

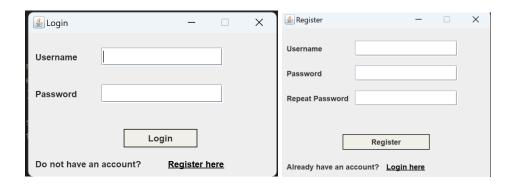
Orkhan Darvishov mostly worked on CRUD operations as well as the implementation of personal and general databases. He used the concepts of OOP in Java, collections framework, stream API, and lambda expressions successfully. He also worked on login/registration classes and the user interface in an effective way. He worked on the bonus part as well, successfully offering the option of selecting English and Azerbaijani languages.

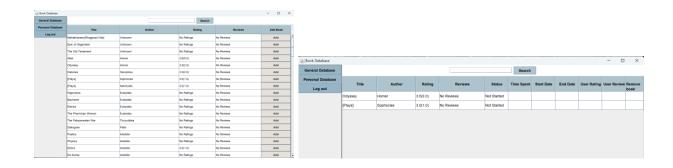
Rinat Fatalizada helped with the bonus part, selecting the language. He also helped with fixing some minor bugs and organization issues.

UI Snippets:





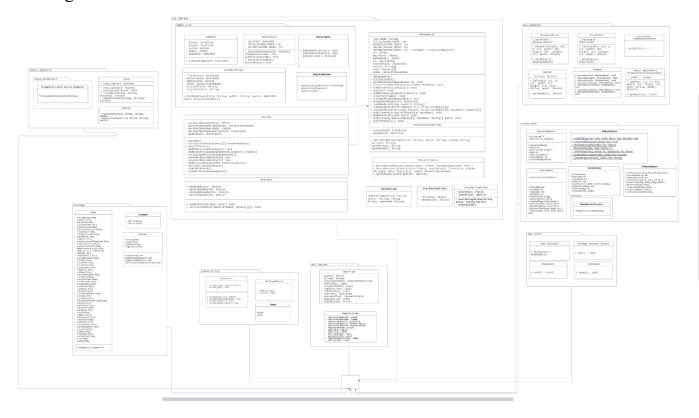




Github Link: https://github.com/ADA-SITE-CSCI-1202/team-project-team-50

Youtube Link: https://www.youtube.com/watch?v=YDOvE3AlUX0

Class Diagram:



Contribution:

Full Name	Student ID	Approximate % of Work Done	What was Done
Bilgeyis Muradova	17974	27.5%	 Developed GUI classes using JavaSwing. Integrated database files with JavaSwing. Implemented sorting, filtering, file reading, and database table functionalities. Utilized generics and inheritance for code optimization. Ensured robustness through successful exception handling. Attentively debugged and fixed code issues.
Jala Almammadli	20285	27.5%	 Created and maintained the UML Class Diagram throughout the project. Ensured that the UML Class Diagram met the

			requirements of all code implementations. Assisted with the design and implementation of Book and Personal interfaces. Contributed to sorting functionality and the overall logic of the management system. Authored the README section, providing an overview of the software's purpose and installation and usage instructions. Wrote the project report, detailing the processes and contributions of each team member.
Orkhan Darvishov	17882	27.5%	 Implemented CRUD operations and database functionality. Utilized OOP concepts, collections framework, stream API, and lambda expressions effectively.

			 Developed login/registration classes and user interface components. Successfully implemented language selection for English and Azerbaijani. Worked on bonus features to enhance the project's functionality.
Rinat Fatalizada	18071	17.5%	 Assisted with the implementation of language selection for the bonus feature. Contributed to bug fixes and addressed minor organizational issues within the project.