

Committee Creator System

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Team 20

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System Functionality

1. Allowing user to search for favorable authors based on:
 - a. Keywords in their published titles
 - b. Published in a particular conference / journal
 - c. Published in a particular year
 - d. Total number of publications till date
 - e. Served previously as a committee member
2. Allowing user to view the author's profile
 - a. His/Her associated school
 - b. Experience as a program committee member
 - c. List of publications till date
 - d. Find Similar Authors
3. Allowing user to create and maintain their own list of short-listed candidates
4. Allowing user to compare the data he has searched graphically

System Infrastructure

A Maven Project

- 1) Front-end:
 - a) Parsed the data from XML and stored it on PostgreSQL which is hosted on AWS.
 - 2) Query Engine:
 - a) Java and JDBC
 - 3) User Interface:
 - a) JavaFX
 - 4) Jenkins hosted on AWS
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Refactoring

1. Two helper classes (TableColumnAdder & UIElementFixer) for the user interface component are extracted
2. `UserInterface.java` renamed `ConcreteUserInterface.java`
3. Two interfaces that are intended to be used for the user interface are moved under a package named `UserInterface.interfaces`
4. Moved our fxml files into `main.resources` package

Design Pattern Implemented

Main Page

```
public static MainPageSingleton instance() throws Exception{
    if (_theMainPage == null){
        return new MainPageSingleton();
    }
    return _theMainPage;
}
private static MainPageSingleton _theMainPage;
```

Query Engine

```
private QueryEngine() {
    connectToDatabaseOrDisconnect();
}

private static QueryEngine queryEngine;

/**
 * Singleton Design Pattern Implemented
 *
 * @return Query Engine instance
 */
public synchronized static QueryEngine instance() {
    if (queryEngine == null) {
        return new QueryEngine();
    }
    return queryEngine;
}
```

Features added in Phase 4

1. Original main page and result page are now merged into a single page
2. Inputting special characters is now prohibited
3. Message boxes added for warnings and progress
4. Charts added for comparing candidates
5. Drag and drop feature added to the page displaying an author's profile
6. Two new kind of information used: associated school (csrankings.org) and committee experience
7. Bibliography table now displays more information of a publication and author details