INSTALLATION INSTRUCTIONS:

How to run project:

Method 1:

Step1: Go to the terminal and run: `git clone https://github.ccs.neu.edu/CS5500-Spring2017/team3.git`
Step2: Import the project **AuthorRetrival** as a maven project in Eclipse IDE
Step3: Run `mvn clean && mvn compile` to clean and compile the project
Step4: Navigate to project folder and run the `mvn test` command to check test cases running in terminal or right click on src/test/java/AppTestSuite.java and select Run As-> JUnit test in eclipse
Step5: Run main.java to start application
Step6: In the login and password page insert "a" and "a" and click on "Login" button
Step7: You will be redirected to Search Authors page where you can search authors

Method 2:
Step1: Run project from the executable jar located at "phase4/authorRetriever.jar". The executable already points to AWS RDS instance and hence there is no need to run the custom parser.

Parser Run Instructions:

1) Open the project "DBLPXMLParser" by importing it in eclipse.
2) Open the file "application.properties" from src/main/resources
3) Set local db credentials in the space provided.
4) Run the scripts database_schema.sql from dbscripts folder in "AuthorRetriever" project.
5) Run the script proceedings_process.sql following the above script.
6) Place "dblp.xml" inside the project "DBLPXMLParser" project.
7) Execute the parser from the DBLPXMLParser project.
8) Run the script "Normalize.sql" for normalizing the database.

Database setup:

1) The system uses an Amazon RDS instance to allow users to start using the system without having to spin a custom database and running the parser.

2) To view how the database is structured and look up data without interacting with the application, you can connect to this AWS Instance with following username and password.
Please note that the credentials used below only have READ ONLY access.

Connection: dblp.c1lyqqia3dks.us-east-1.rds.amazonaws.com
Username: testuser
password: testuser
PORT: 3306

Technology Used:

JavaFX (UI)
Core Java with JDBC (Data Access Layer)
MySQL (Database)

System Functionality:

The following are the system functionalities of Author Retrieval System:

1. **User Login**: User can login into the system using a username and password.
2. **User Registration**: User can register into the system using a username and password.
3. **Search**: User can search for authors based on the following criterias:

- **Search based on publication information**:

This is searching based on information associated to the publications by authors. It includes search based on one or more of the following criteria:
- Minimum number of publications
- Published/not published in one or more conferences
- Publications done before or after specific year, or in a year range
- Title or keyword of the publication.

● **Search based on service information**:
This is searching based on information associated to the service by authors. It includes search based on one or more of the following criteria:
○ Served/Not served in one or more conferences
○ Service offered before or after specific year, or in a year range
○ Position of the author during the service

● **Search based on author information:**
This is searching based on an author's name. It includes search based on the following criteria:
○ Matching author name

4. **View Author Profile**:
User can view the following information on an author's profile page:
● Author's name
● Author's affiliated university
● Author's webpage URL
● List of publications by the author
● List of committees served on by the author
● User can perform the following important functionalities on author's profile page:
○ Go to an author's webpage which is a web view embedded in new window.
○ Shortlist an author.

5. **View Shortlisted Authors**: User can shortlist authors that he/she finds interesting from an author's profile page. At any point user can view the shortlisted authors, remove an author from the list, or select an author from the list to view his profile.

6. **Export Author List**: User can export the list of authors obtained as search result or the list of shortlisted authors in PDF format.

7. **Sort Authors**: On the result page, user can see the list of authors easily with the help of pagination. At any time, user can sort authors on a single page in ascending and descending format.