Applied Software Engineering Assignment 2
Element 1
Implementation and Report

Orestas Augustinaitis

ID:21321323

Table of Contents

Introduction

I had been assigned to create an information system for the IT In The Valley Magazine. The system should help the company with the magazines creation. System has to have the ability to have a database with the advertisement details from the advertisers, as well it should store the media from the journalists and photographers. As well payment information should be provided for the contributors, the fees, and payments can be issued from within the application. A magazine constructor should be present as well, to help with the creation of the magazine. Not all of the goals have been completed, since our assessment has allowed us to make an implementation for only one use case.

The application functionality and development with explanation can be found further below.

The Application

While developing this application, my main goal was to implement the main functions which were required by the assessment. The application was developed with .netbeans in java programming language, and the GUI was made using the Java FX. Database was made using the sqlite library extension for netbeans. The magazine page generator was done by using the j2html library extension. The design was done by using simple icons and .css functions to make the design.

The main base of this application is from a different application, since writing that kind of big code in this short time wouldn't be much possible. This app has been written by me before, however its purpose was for my relatives clinic, who needed an application to sort prescriptions for patients. However, it was unfinished, and when I looked at the code, I realized that by editing it and adding the functions which the assessment requires, it can perfectly fit. Due to that some different code naming can be seen in the code.

Main Functions with Explanation and Images

- **Login/Registration System, with SQL database.**
  Login: admin
  Password: admin
  Packages responsible for Login authentication:
  AuthGetway.java
  LoginController.java

- **Main Menu**

  The main menu consists of:
- Home – The main home page shows us a mini counter, of total magazines, total ads/media, total magazines issued, and total templates.
- Magazine Issue – A finished pages can be generated and printed.
- Templates – Templates can be made for a page.
- Magazines – A storage of magazines with its relevant information and covers.
- Adverts/Media – A storage for advertisements/media.
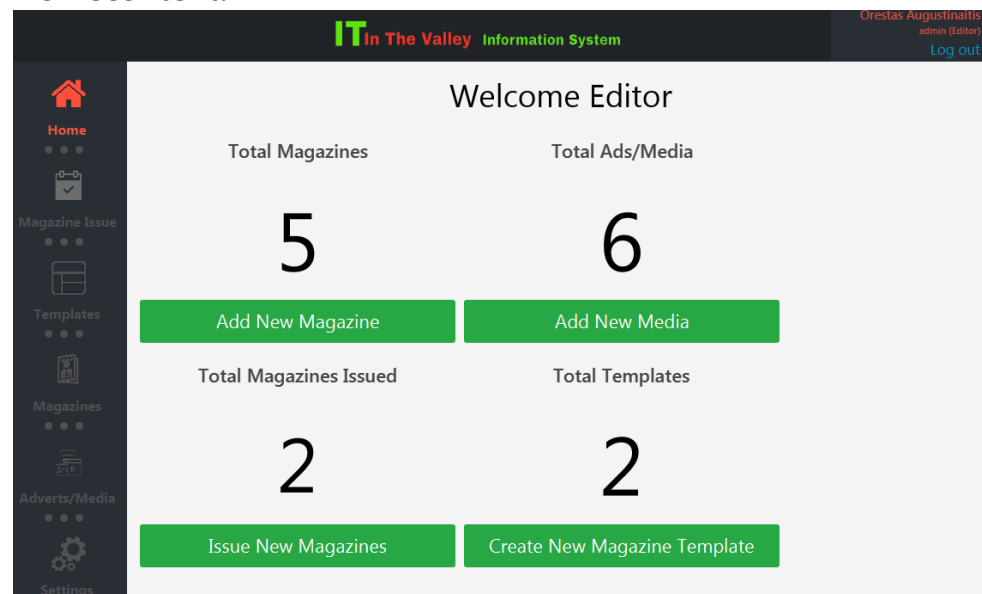- At the right top corner we can find the persons credentials who had logged in.

  Packages for the main menu:

  Homecontroller.java
  Homecontentcontroller.java
  Home.fxml
  Homecontent.fxml

- **Adverts/Media Section.**

   In this section we have the Ability to add adverts/media into the list, with advertisers/contributors details, by pressing the new ad/media button. All the ads in the list can be edited, viewed, and deleted. The used in magazine sections shows a number in how many magazines pages the ad has appeared. All the data is stored in SQL database.

   Packages:

   AdsController.java

   EditAdsController.java

   NewAdsController.java

   Ads.fxml

   EditAds.fxml

   NewAds.fxml

#	Company	WebPage	Content/Type	Used In Magazine	Used in Template	Action	+
1	Props4you	www.Props4You.co.uk	Prop/Fake money for m...	2	2	Edit View Delete	
2	University of west london	www.uwl.co.uk	University for all!!!	0	0	Edit View Delete	
3	Lenovo	Lenovo.co.uk	Computers	1	1	Edit View Delete	
4	Apple inc	Apple.com	Apple Inc Computers	1	1	Edit View Delete	
5	Samsung	www.samsung.co.uk	Mobile Phones	0	0	Edit View Delete	
6	Microsoft	www.microsoft.com	WIndows	0	0	Edit View Delete	

- **Change Editor password/Details in the settings section.**

Some sections will be shown in the generated magazine page. These can be deselected.

Update your profile

User Name :	admin	*Your Login Name
Email :	Editor@magazine.co.uk	
Full Name :	Orestas Augustinaitis	*Will be shown in Magazine
Phone :		☐ *Show in Magazine
Address :		☐ *Show in Magazine
Additional In...	Chief Executive Editor	* Will be shown in Magazine

Update   Change Password

■ Editor info updated   ✕

Updated   ⓘ

Editor info has been updated

OK

- **Explanation regarding the GUI.**

  A Java FX GUI, which gives a sleek and lovely look of the application. *(I do know, that the GUI was not required regarding the implementation, however when I write applications, without the GUI an application doesn't look to me as it should, as well it gets limited by the command shell, since only GUI shows the main functionality and visibility of how it looks, and acts. As well playing with command shell to check functionality isn't for me. Since this application has been started before, and I had it started with GUI, I had decided to use it, and continue with the GUI. By writing the app function controller classes, and using Java FX for GUI, it didn't take much time to create the GUI overall)*

- **Magazine section.**

  Magazine creation, with their proposed covers. The magazine creation is like a starting point in this application for the editor of the magazines. Every magazine shows the date when the magazines has been started, as well the type of it, duration, and number of ads it has in its pages. By pressing the history button, we can see all the pages of the magazine and go through them.

  Packages:
  EditMagazine.java
  Magazinecontroller.java
  MagazineHistorycontroller.java
  NewMagazineController.java
  EditMagazine.fxml
  Magazine.fxml
  MagazineCard.fxml
  MagazineHistory.fxml
  NewMagazine.fxml
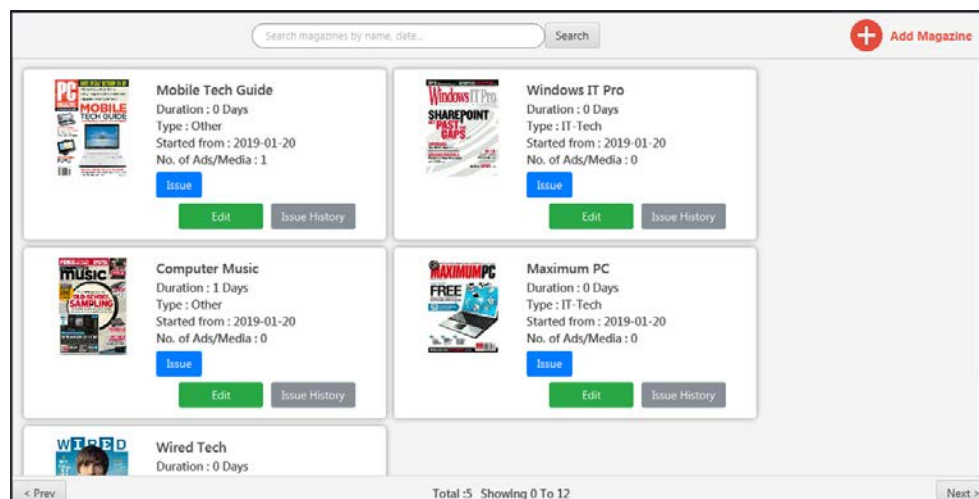
- **Templates**

  Template creation for magazine pages, in this section we can see that there are 2 templates created, which can be used for the pages. These can be called like draft pages for the magazines, which can be edited before issuing a magazine.

#	Template Name	Notes	Number of Ads/Media	Action	
				Search	New Template
1	Mobile Tech	Unfinished	1	Edit View Delete	
2	Cyber Security Mag	Not Finished!!!! Do not touch!!	3	Edit View Delete	

- **Adding templates**

  Adding a template is very easy, from the image we can see that on the left side is the content of the page, usually the reading side. In the middle we can select ads/media from the drop down menu. Or if we want to add new ads, we just press the + button. The bottom table shows us the ads that are currently implemented into the template. These can be edited and deleted.

- **Magazine issue**

  Here is the section of the magazine page issuing. From here the magazine pages can be made and generated by pressing issue new magazine.

- **Issuing a magazine**

  When we press the issue magazine button, we then have to select to which magazine we are going to add a new page.

- **Adding a new page**
  When we press issue, we then go into the template, from the left top corner we can select a template which were made before. Like a draft ones. More ads can be added and information can be edited.
 To finish the page and generate, press the Save&Print Magazine ant the bottom middle button.

- **Generated Page**

  And here is the generated html page, which can be printed straightaway. I do understand that this doesn't look like a magazine, but I hope that the idea is understandable. We have the content on the left, and the ads are in the middle. I could have putted more effort into the generation and placement of the page, however I just wanted to show a clear idea of that is possible to make. It can be made better, if it would be used for a real magazine creation company.
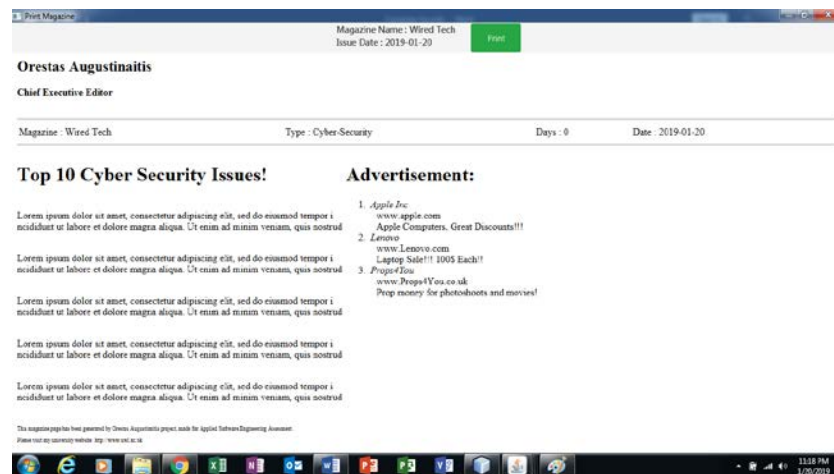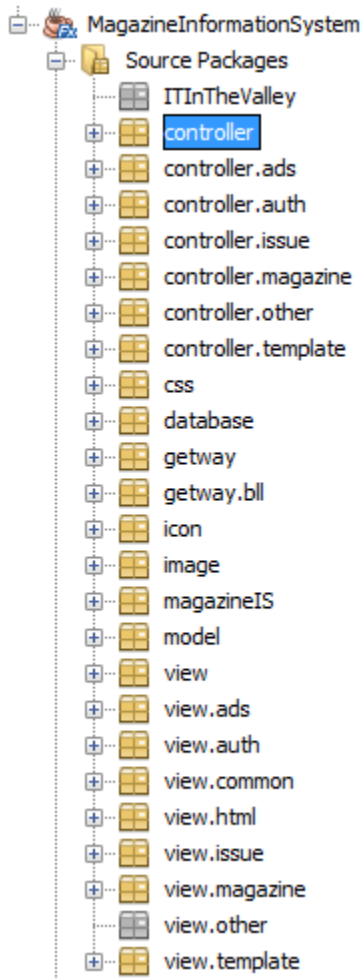
- **Previously created page view.**

  The older pages can be viewed from the magazine history section.
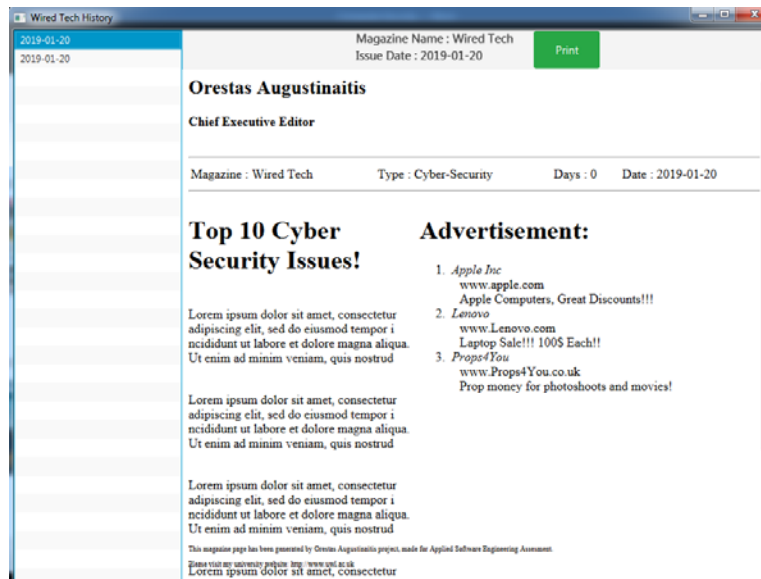
Application development

As mentioned before, the application was developed using netbeans with java, java FX and sqllite.

The packages that I made can be easily categorized, the controllers are java class files, which have the main code assigned to a FXML controller. All the FX Gui designs can be found in the packages starting with view.

The getway packages are for the authentication of users and storing the data into the sql lite database. These databases were easy to use, since no connection is required within the netbeans application. It has all the storage in the project folder itself.

So, when opening this project, there is no need to set an sql server on the localhost machine, the project can be compiled, built, and started straightaway.

The Login is: **admin**

Password: **admin.**