

The University of Edinburgh

School of Informatics

3rd Year, Semester 1

SOFTWARE ENGINEERING LARGE PRACTICAL

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Summary

The purpose of this application is to allow users to browse through courses taught by the School of Informatics at The University of Edinburgh and finally see a timetable for the courses they choose to take. The application will let students search through courses based on certain criteria's and choose the courses they want to take. After which they will be able to see a timetable view of the course they have selected. The application can run on phone's running Android SDK 2.3.3 at API level 10 and above.

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1.0 RUNNING THE APPLICATION

LOADING AND RUNNING THE APPLICATION ON ECLIPSE

The following steps have to be followed to run the application on eclipse.

1. Start Eclipse
2. Go to 'File', then click on 'Import'. You will see the screen shown in the image below.
3. Select 'File System' under the General folder and then click next. You will then see the window shown in the image below.
4. Then click Browse and find the folder named 'Informatics Timetable'. After you have found the folder, select it and then click 'OK'.
5. Then check the folder appearing on the left and click 'OK'.
6. After this you simply need to create an AVD with Target SDK 2.3.3 at API level 10 and run the application.

2.0 FUNCTIONIONALITY

ACTIVITY FLOW

If the application is being run for the first time, then the application follows the path described below.

(1) WelcomeScreen → FilterCourses → SelectCourses → Timetable

1 – **WelcomeScreen** – On this activity, the user will see a loading screen while the three xml files are downloaded and parsed from the websites and then put into the database. After it has completed parsing the user may continue to the next activity by simply touching the screen.

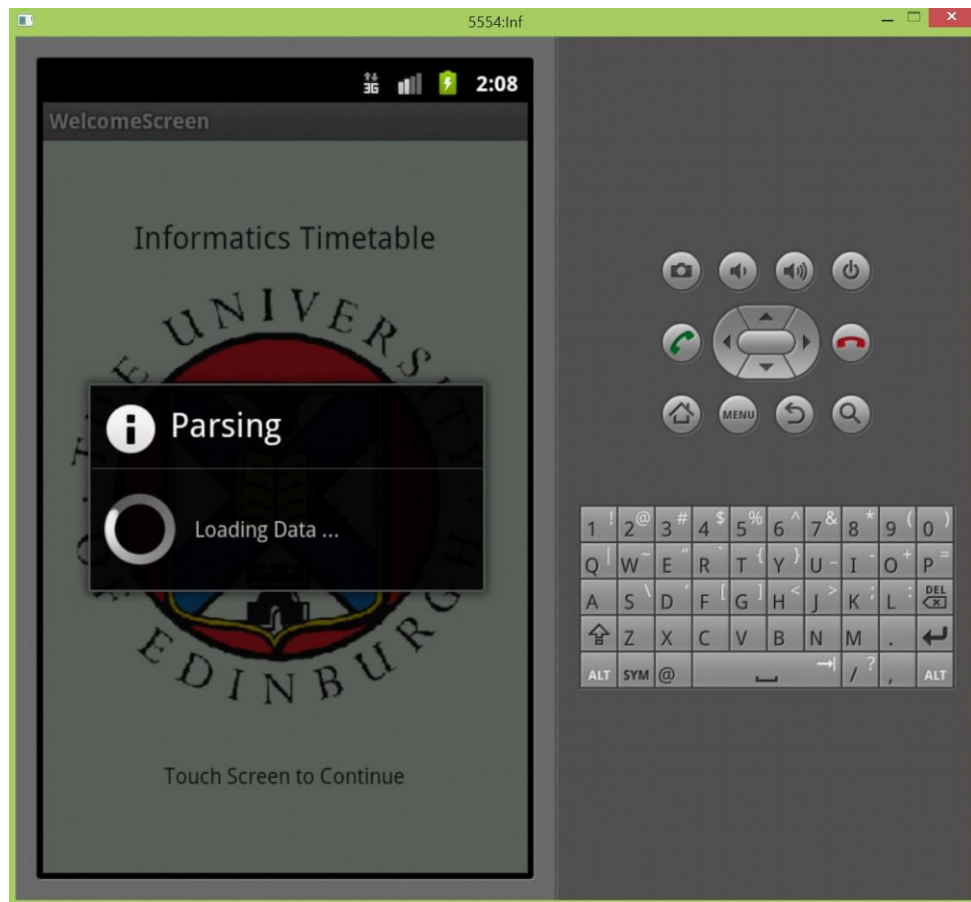


Figure 1.0 – Welcome Screen

2 – **FilterCourses** – On this activity, the user will be able to filter courses by semester, year, course acronym and name. If the user wants to see all the courses available at the school of Informatics then he can just click on the 'Search Courses' button and leave the fields as their default value.

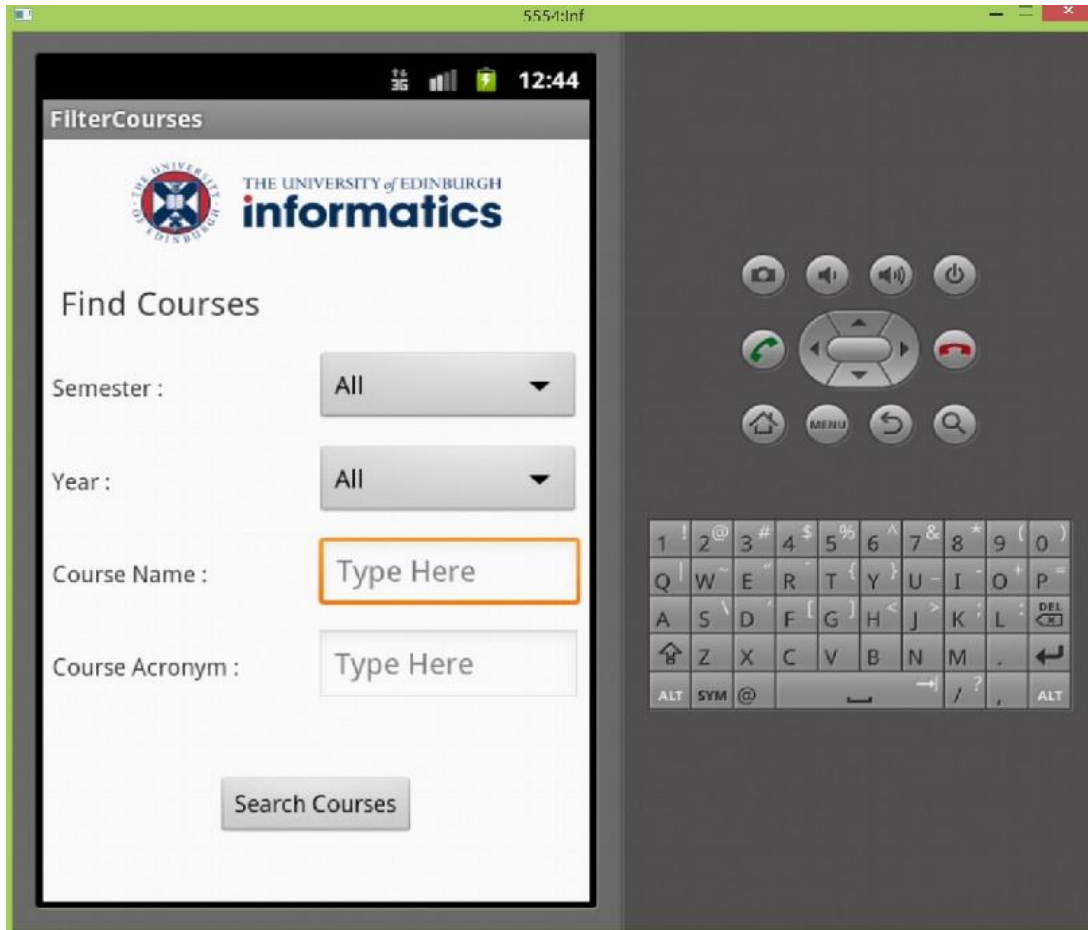


Figure 1.1 – Filter Courses

3. – **SelectCourses** – On this activity, the user will be able to view the courses and information about them in a list view. If the user wishes to take a particular course then he can go press on the checkbox at the left hand side of each item in the list view and it will highlight the course yellow. To view only the courses that have been selected the user can click on the 'Show Selected' button. If the user wants to go back and choose more courses after viewing the ones selected, the user can click on the 'Show Filtered' button. After the user is happy with his choices he can click on the 'Create Timetable' button.

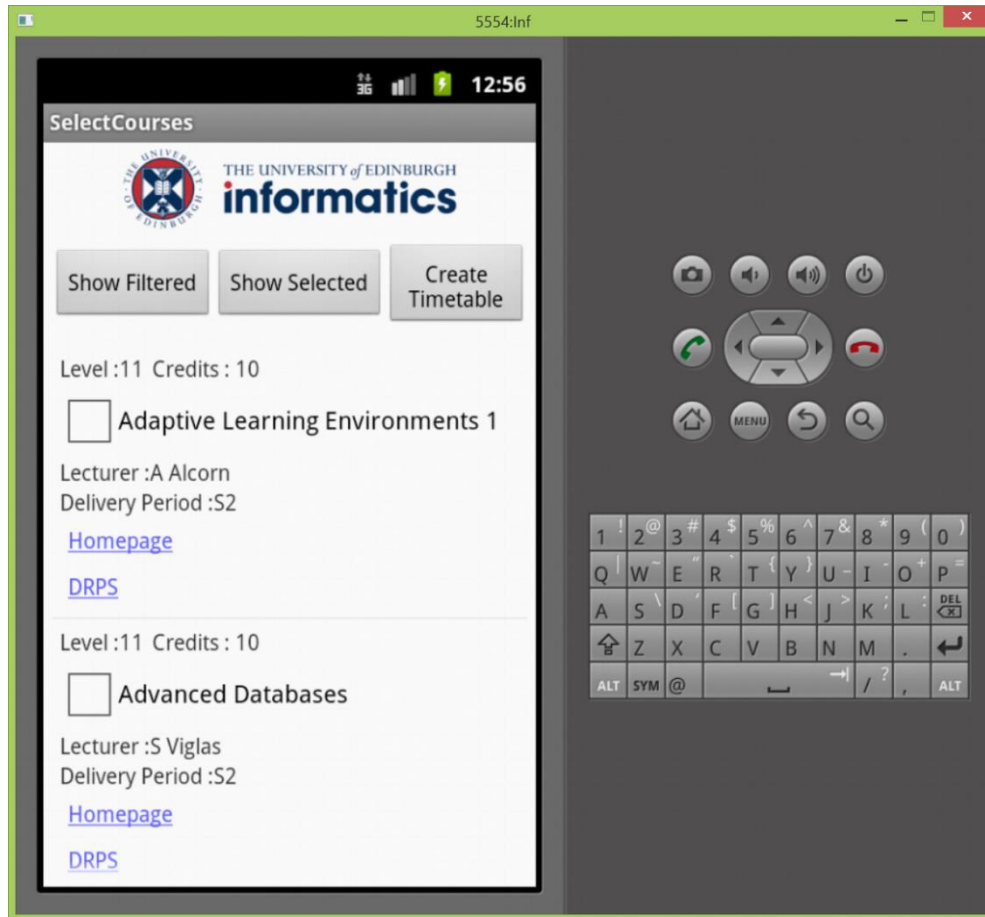


Figure 1.2 – Select Courses

4. – **Timetable** – On this activity, the user is able to see his timetable of the selected courses. It will also save the timetable into the database so the user does not need to create the timetable again when he reopens the application.

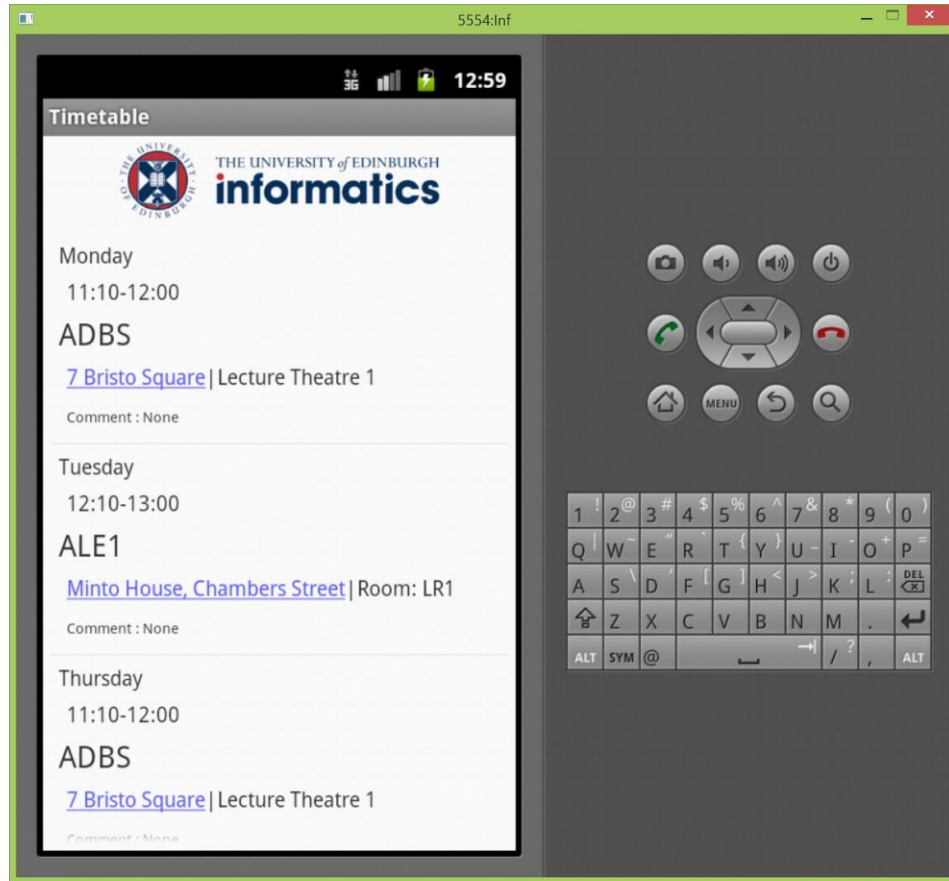


Figure 1.3 – Timetable

If the application has been run before then the activity flow can take two paths will be as described below.

- (1) WelcomeScreen → MenuScreen → Timetable
- (2) WelcomeScreen → MenuScreen → FilterCourses → SelectCourses → Timetable

The function of the MenuScreen activity is as described below.

5. – **MenuScreen** – On this activity, the user may choose to view the last saved timetable created on a previous run of the application and follow the activity flow (1) or make a new timetable and follow the activity flow (2) by clicking on the 'Make a New Timetable' button.

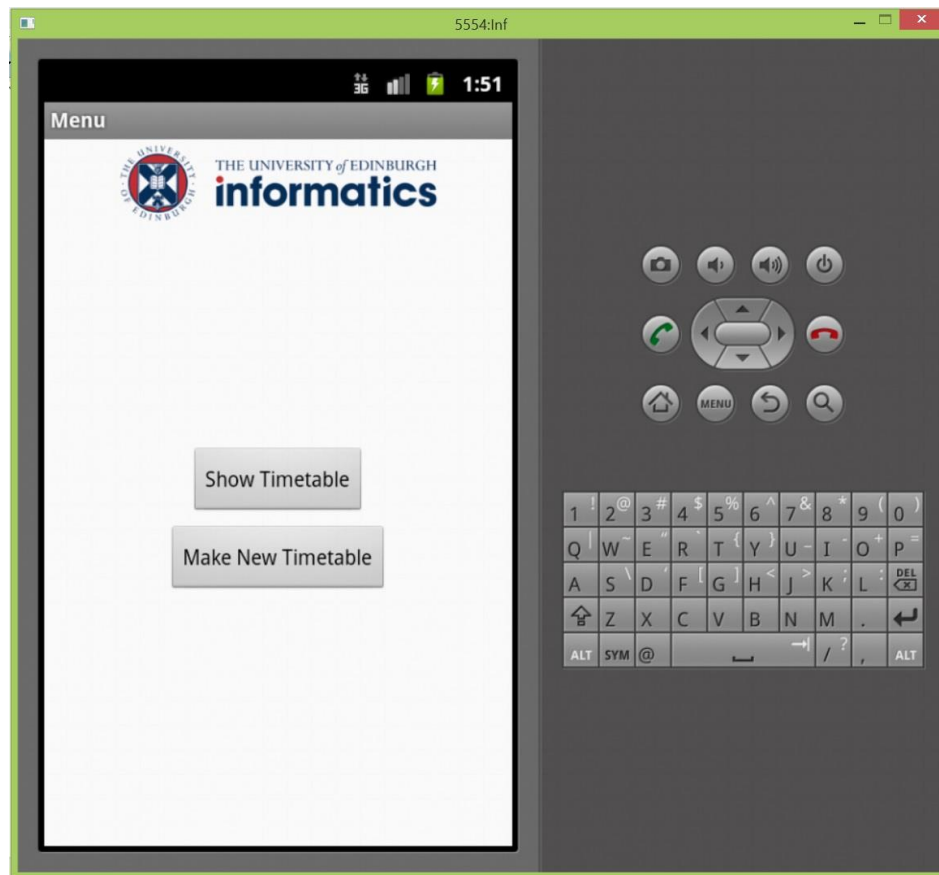


Figure 1.4 – Menu Screen

3.0 Extra Features

On the **SelectCourses** Activity the user will be able to click on the hyperlinked textviews to view more information about the course. The 'Homepage' and 'DRPS' hyperlinks will take the user to the courses webpage and DRPS page respectively using the phones inbuilt browser.

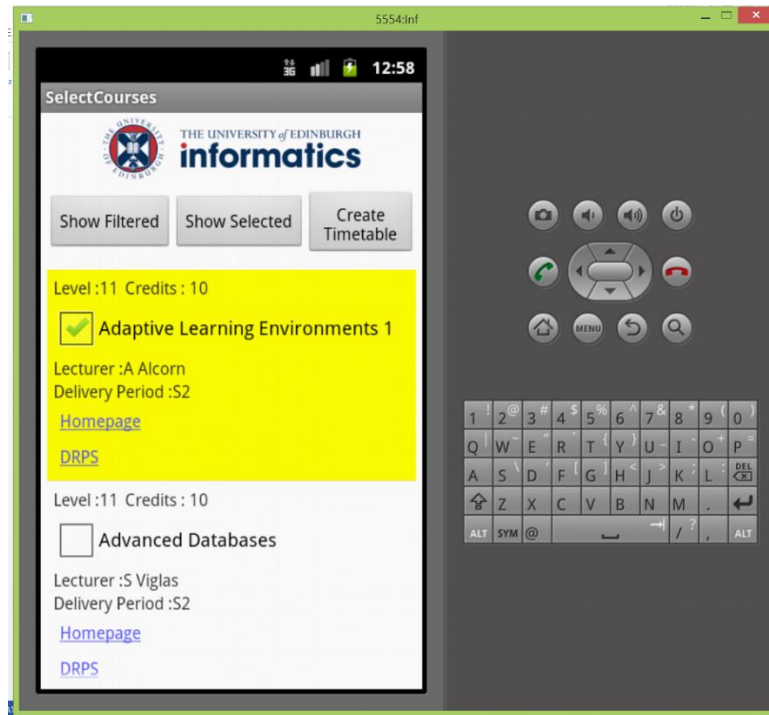


Figure 1.5 – Selected Course
'Adaptive Learning Environment 1'

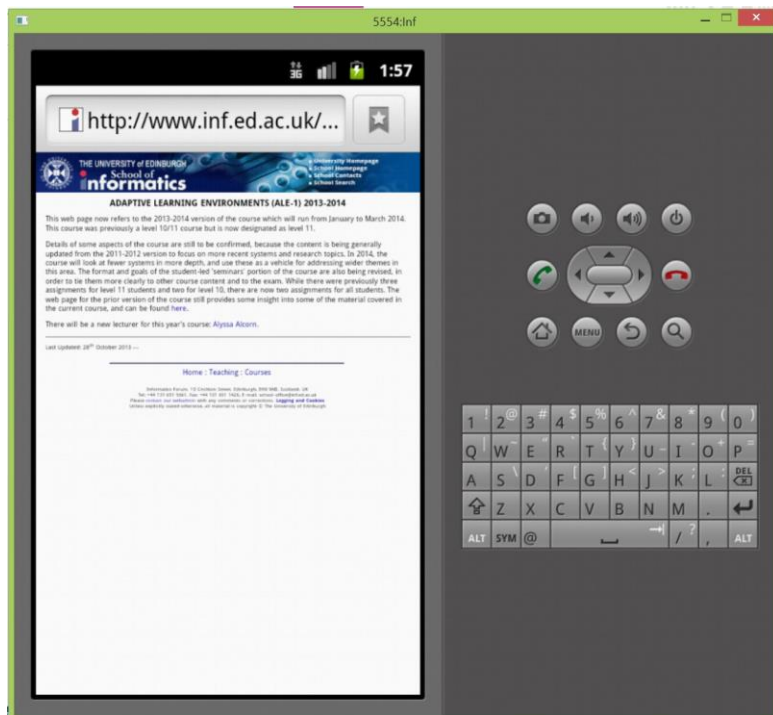


Figure 1.6 – Homepage for 'Adaptive Learning Environment 1' after Homepage linked clicked on in Figure 1.5.

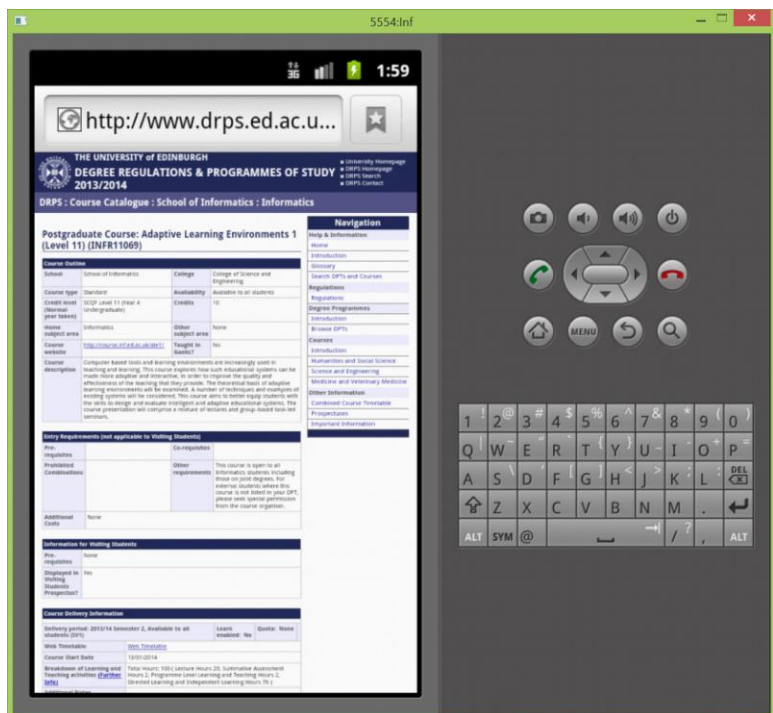


Figure 1.7 – DRPS for 'Adaptive Learning Environment 1' shown after DRPS linked clicked on in Figure 1.8.

On the **Timetable** Activity the user will be able to click on the hyperlinked building description which will take the user to a webpage showing the location of the venue in a map.

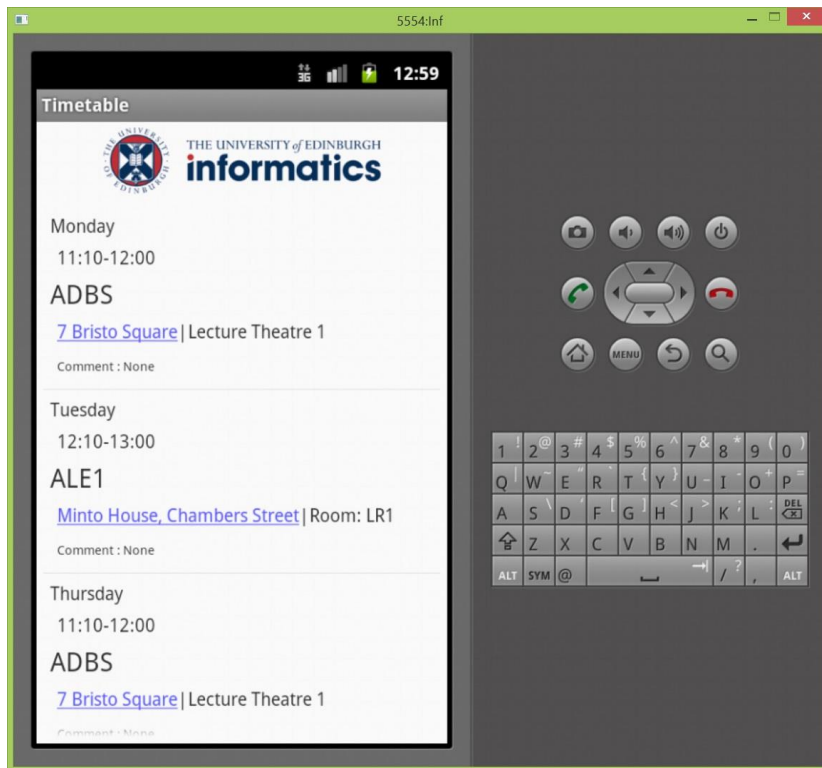


Figure 1.8 – Timetable View for 'Adaptive Learning Environment 1' and 'Advances Databases'.

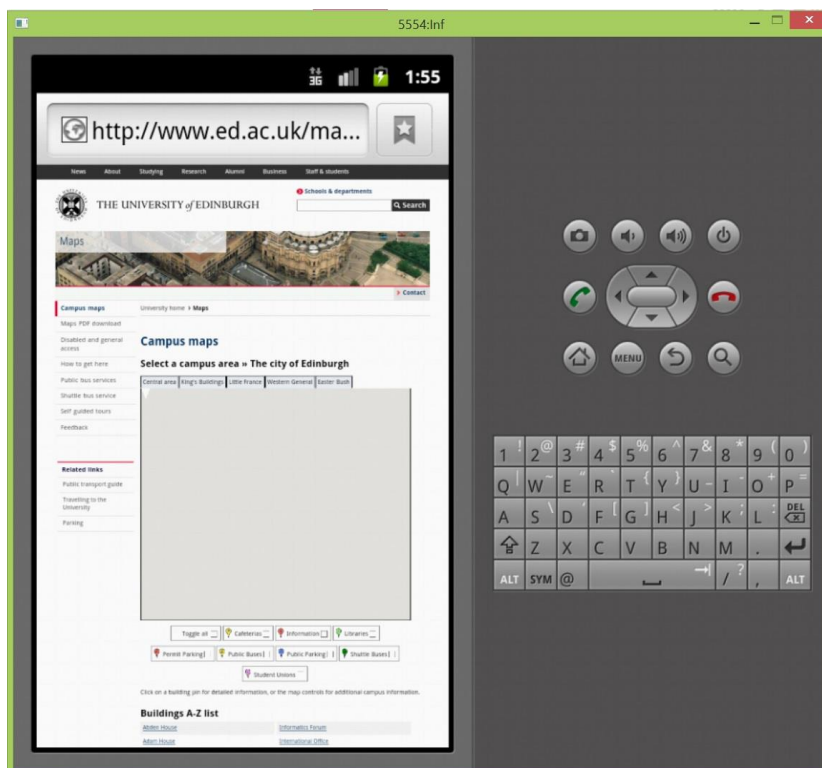


Figure 1.9 – Webpage showing location of 'Adaptive Learning Environment 1' after Address linked clicked on in Figure 2.0.