

## Appendices

### Appendix A

#### Screen Shots of User Interface

This appendix provides screenshots of various stages of the working of the complete system and the various user interface features. The system has the option for users to search for details about various online courses in terms of topic, provider, instructor, certification, price and level. The option to bookmark courses is also included and the entire system works offline with provision to update newest courses.

The application when started is shown below in Figure A.1 with the main menu showing various buttons – ‘Search’, ‘Update’, ‘Bookmarked Courses’ and ‘Clear All Bookmarks’.



**Figure A.1: Main menu of the interface**

Figure A.2 shows the window of the application when ‘Search’ button is clicked on the main menu. This window has different functionalities like searching for courses based on course name, course provider, certification, instructor, price and level.



**Figure A.2: Search menu of the interface**

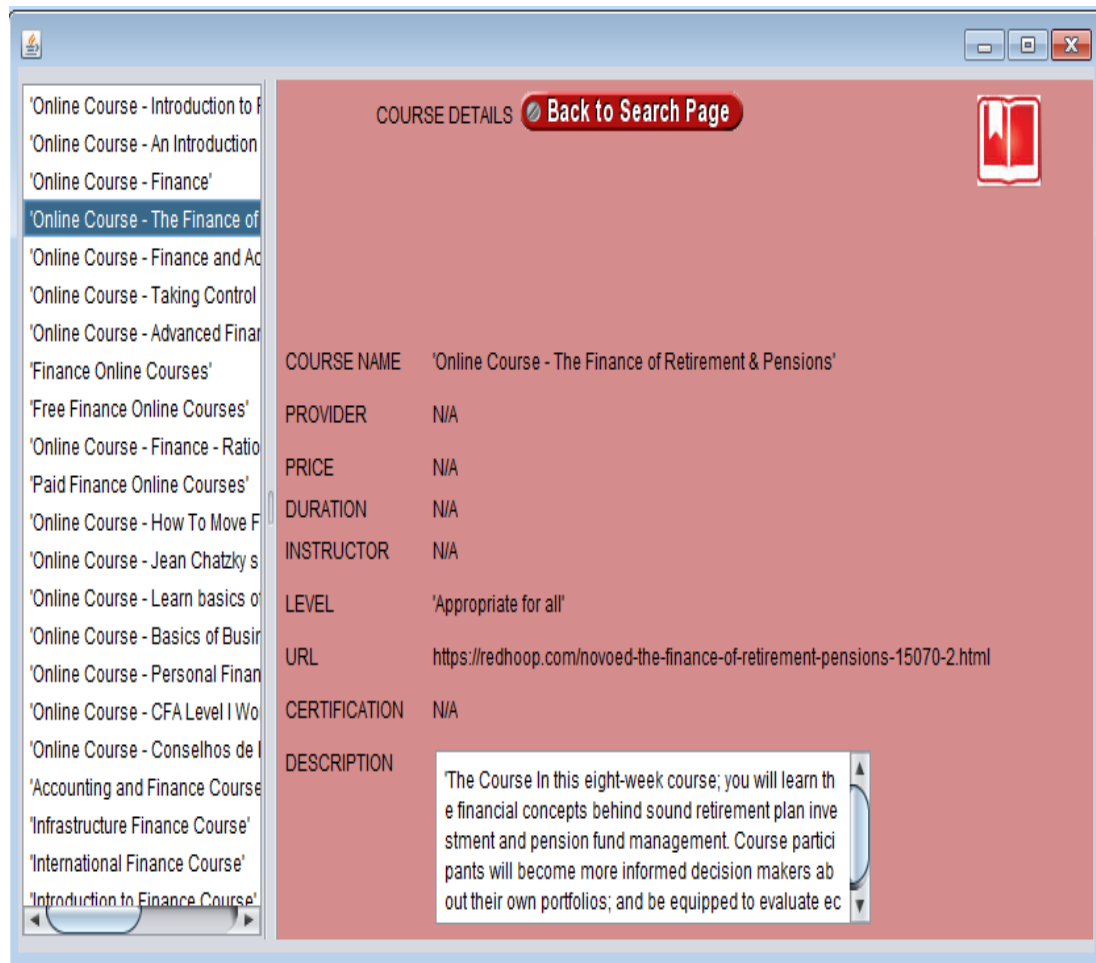
Figure A.3 shows the interface of the application for search by ‘Course name’ filter which provides a text field for the user to enter the name of the online course and a ‘Search’ and ‘Back’ button to find the courses and navigate back to the main menu respectively.



The image shows a web application window with a light blue border. In the top right corner, there are standard window control buttons (minimize, maximize, close) and a red square button with a white house icon. On the left side, there is a 3D illustration of a yellow stick figure holding a magnifying glass, positioned next to a stack of four books (red, green, blue, and white) topped with a black graduation cap, and a rolled-up diploma tied with a red ribbon. Below this illustration, the text 'Course name:' is displayed in red. To the right of this text is a white rectangular text input field. At the bottom of the window, there are two red buttons with white text: 'Back' on the left and 'Search' on the right.

**Figure A.3: Search by course**

Figure A.4 shows the interface of the application containing the search results after ‘Search’ button is clicked (based on any of the filters). The left pane shows the list of courses and when any of the courses is clicked, the description of the course is shown on the right pane of the window. It has ‘Back to Search Page’ button at the top of the window for navigation purpose and also a ‘Bookmark’ button on the top right corner used to bookmark the courses as a list of favourites.



**Figure A.4: Results**

Figure A.5 shows the interface for search by ‘Certificate’ filter, which searches for the courses that provide certification at the end of the course. It has two options – ‘Yes’ and ‘No’. It also has ‘Back’ and ‘Home’ buttons for navigation purposes.



**Figure A.5: Search by certificate**

Figure A.6 shows the interface for search by 'Price' filter. It has two options – 'Free' and 'Paid' which provides free courses and paid courses respectively. It also has 'Back' and 'Home' buttons for navigation purposes.



**Figure A.6: Search by price**

Figure A.7 shows the interface for search by ‘Provider name’ filter, which provides a textbox for the user to enter the name of the course provider as per their interests. It also has ‘Back’ and ‘Home’ buttons for navigation purposes.



**Figure A.7: Search by provider name**

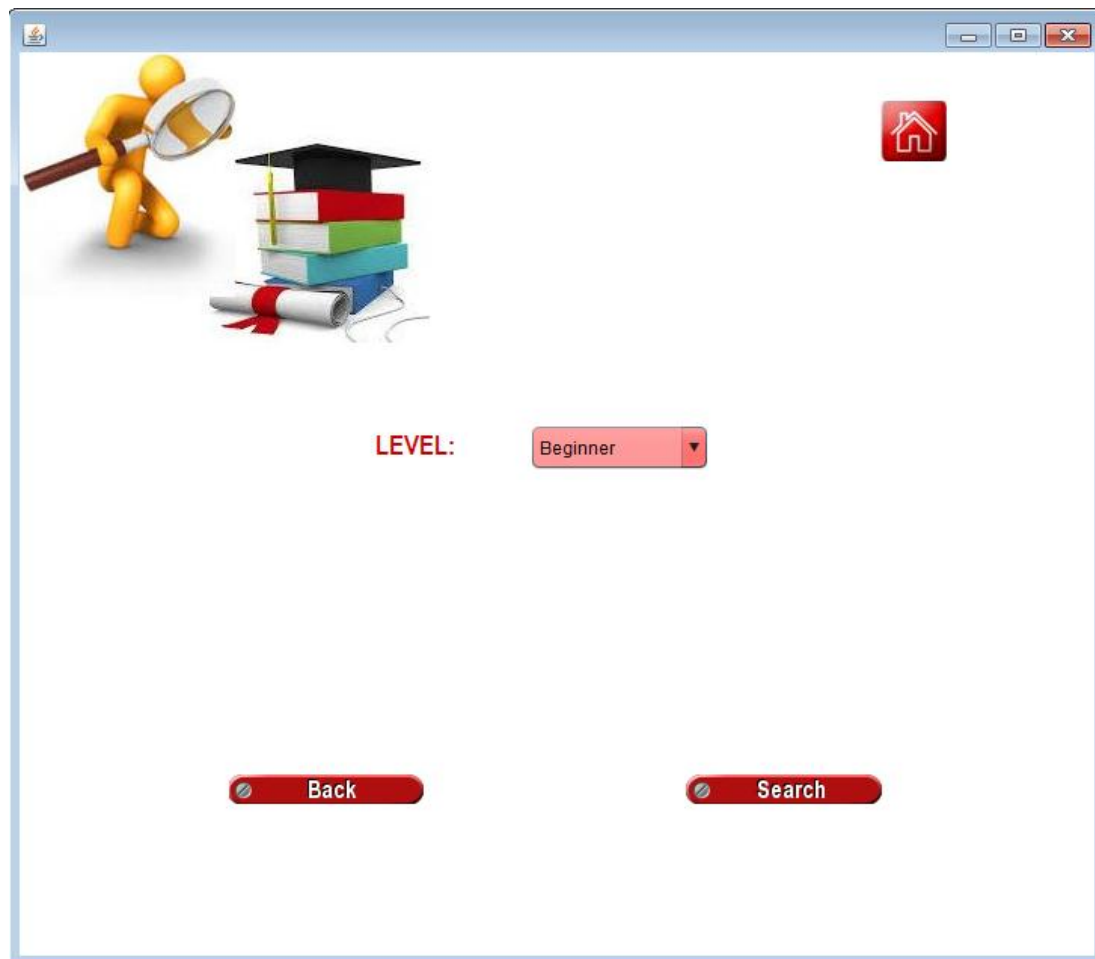
Figure A.8 shows the interface for search by ‘Instructor’ filter, which allows the user to search for the list of courses taught by a specific instructor. It provides a text field for the user to enter the name of the instructor. It also has ‘Back’ and ‘Home’ buttons for navigation purposes.



**Figure A.8: Search by instructor**

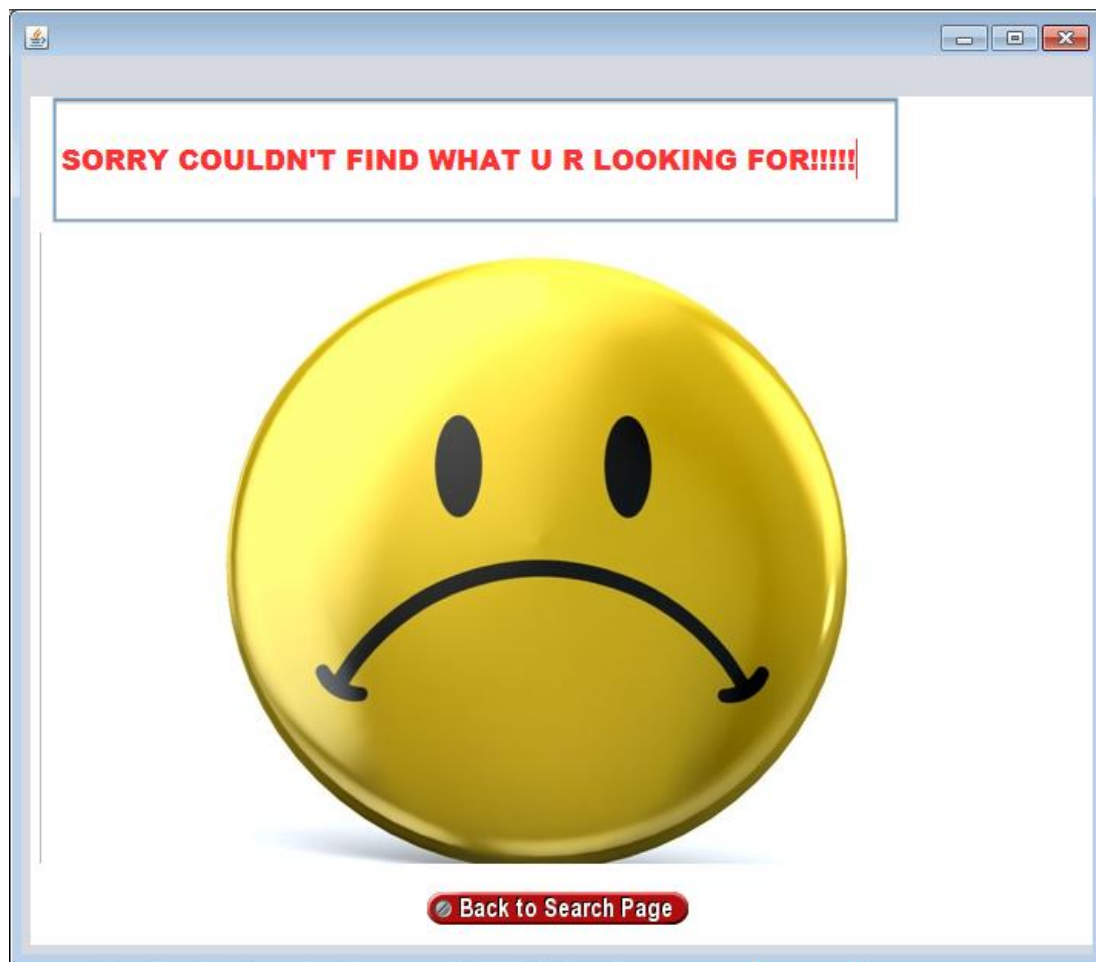


Figure A.9 shows the interface for search by ‘Level’ filter, which provides the user with options – ‘Beginner’, ‘Intermediate’ and ‘Advanced’ levels of courses. It also has ‘Back’ and ‘Home’ buttons for navigation purposes.



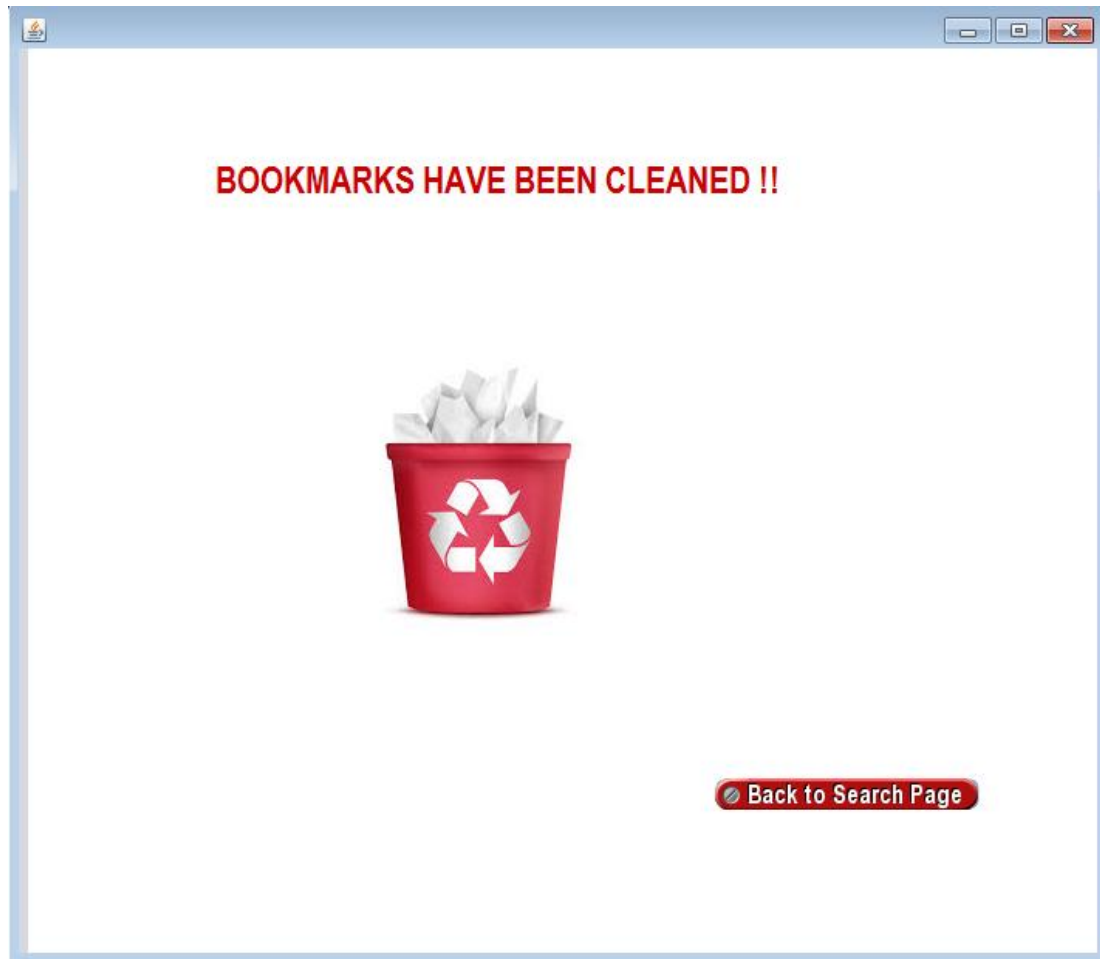
**Figure A.9: Search by level**

Figure A.10 shows the interface of the application when invalid searches are performed like usage of numbers/special characters in the text field of the search option or if the course searched for doesn't exist. It also has 'Back to Search page' button for navigation purpose.



**Figure A.10: Sorry page**

Figure A.11 shows the interface when ‘Clear All Bookmarks’ button from the main menu is clicked. It erases all the bookmarks saved previously. It also has ‘Back to Search page’ button for navigation purpose.



**Figure A.11: Clearing of bookmarks**

## Appendix B

### List of course providers covered in the application

This appendix lists the various providers covered for various online courses, gathered from crawling the web. The providers are listed in descending order of the number of courses offered by the provider. Each of these providers is gathered from various renowned sources and cover multiple countries, departments and lecture formats. These are listed below:

1. Massachusetts Institute of Technology
2. University of Michigan
3. Coursera
4. Udemy
5. Edx
6. Khan Academy
7. Open2Study
8. Udacity
9. Learnable
10. PluralSight
11. Treehouse
12. Tuts+
13. CreativeLive
14. CreatorUp
15. Lynda
16. SkillShare
17. TrainSimple
18. Craftsy
19. GeneralAssembly
20. CreativeBug
21. Columbia University
22. Harvard Hillsborough
23. Community College
24. IISc Bangalore
25. IIT Bombay
26. IIT Delhi

27. IIT Guwahati
28. IIT Kanpur
29. IIT Kharagpur
30. IIT Madras
31. IIT Roorkee
32. Lancaster University
33. London School of Business and Finance
34. McGill University
35. New Jersey Institute of Technology
36. North Carolina State University
37. OpenMichigan
38. Portland Community College
39. Princeton University Press
40. Stanford
41. Stony Brook University
42. The University of New South Wales
43. UC Berkley
44. UC San Diego
45. UCLA
46. University of California
47. University of Canterbury
48. University of Houston
49. University of Illinois
50. University of Michigan
51. University of Missouri Kansas City
52. University of Oregon
53. University of Sulaymayyah
54. University of Toronto
55. University of Washington
56. Virtual University
57. Yale University
58. University of Minnesota
59. University of Pennsylvania

60. University of Florida