Functionality Test Plan

Project name: SRV

Version:
Date:30/06/2019
Status: Draft

For more information

Project Contact:

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Tel.:

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Revision History:

Version	Date	Author(s)	Change Description
1.0	29/06/2019	Team NAG	*First draft.*

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1 Project overview

This section is designed to give an overview of the project.

4.1 Definitions & Acronyms

The following definitions and acronyms are used throughout this Document (Test Plan) they may refer to terms used by the client or by the development team.

Term	**Meaning**
TM	Testing Manager
UT	Unit Testing
UD	User Documentation
SRS	Software Requirements Specification
SDD	Software Design Documentation
CRUD	Create, Read, Update and Delete

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1.1 Project name

SRV Management System Functionality testing project

2 Testing Overview

TAFESA is developing a new SRV System to improve theirs old system. In the process of the development, we need to conduct the Testing for the developing codes.

2.1 Testing Objectives

We need to test CRUD process of Administrators, Lecturers and Students

2.2 Resources and Responsibilities

Testing Manager	Ngo Nguyen
Lead Developer	Gonzalo Soto
Test Lead	Ngo Nguyen
Testers	Alessandro Ferro

Clients:

Dale Van Herr

Testing team:

Team NAG, from TAFESA

2.3 Document Scope

The scope of this document is to outline and describe the testing process of *SRV Management System* from a technical and development perspective. This document outlines a detailed plan and schedule which provides the testers and client(s) with clear guidance in the testing phase.

This document is divided into the key areas of the testing process. This document will primarily be used by the tester(s) to test the application in accordance with the functional requirements of the system. It may be used, in full or part, to assist in explaining the final design of the application to the client and acceptance of the application, as well as serve as the basis for any desired changes.

The broad structure and key areas of this document is as follows:

1. Introduction
2. Testing Overview
3. Testing Strategy

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4. Environment Requirements
5. Test Schedule
6. Control Procedures
7. Functions To Be Tested
8. Risks
9. Tools
10. Documentation
11. Test Cases
12. Approval
13. Appendix

2.4 Testing Scope

The scope of the product has been outlined in the functional requirements specifications and design specifications like class diagrams.

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3 Test Strategy

The test strategy consists of a series of different tests that will fully exercise of the Management System of SRV. As we are using web technologies Unit testing, whitebox, blackbox, system methods are not applicable The primary purpose of these tests is to uncover the systems limitations and measure its full capabilities. A list of the various planned tests and a brief explanation follows below. However, the current focus at this stage is mainly on unit testing which will allow the developers to proceed to develop user interfaces.

3.1 Functionality Test

The System tests will focus on the behavior of the Management System. User scenarios will be executed against the system as well as screen mapping and error message testing.

4 Environment Requirements

Standard PC workstation with Windows 7.

- Intel Core processor
- 4.00 GB Internal Memory
- 32/64 bit Windows 7
- 500 Gb Hard Disk
- Network attached printer
- Visual Studio 2010
- Nunit framework 2.6.x

5 Test schedule

- Ramp up / System familization 28/06/2019 – 28/06/2019
- Integration Test TBA
- Beta Test TBA
- User Acceptance Test TBA

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6 Control Procedures

6.1 Reviews

The tester(s) will perform reviews for each Phase. (i.e. Requirements Review, Design Review, Code Review, Test Plan Review, Test Case Review and Final Test Summary Review). A meeting notice, with related documents, will be emailed to each participant.

6.2 Bug Review meetings

Regular weekly meeting will be held to discuss reported defects. The development department will provide status/updates on all defects reported and the TAFESA test department will provide addition defect information if needed.

6.3 Change Request

Once testing begins, changes to the Management System are discouraged. If functional changes are required, these proposed changes will be discussed with the Change Control Board (CCB) and discussed with the client with the obligations and responsibilities. The CCB will determine the impact of the change and if/when it should be implemented.

6.4 Defect Reporting

When defects are found, the testers will complete a defect report on the defect tracking system. The defect tracking Systems is accessible by testers, developers & all members of the development team. When a defect has been fixed or more information is needed, the developer will change the status of the defect to indicate the current state. Once a defect is verified as FIXED by the testers, the testers will close the defect report.

7 Functions To Be Tested

The current stage of the testing is focused on the Unit Testing. The available classes for testing are given in the class diagram attached. The classes available for testing are:

- Create an Administrator
- Read a list of Administrators and read one Administrator
- Update an Administrator
- Delete an Administrator
- Create a Lecturer
- Read a list of Lecturers and read one Lecturer
- Update a Lecturer

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- Delete a Lecturer
- Create a Student
- Read a list of Students and read one Student
- Update a Student
- Delete a Student
- Export file to PDF
- Search box given a criteria

Tester(s) is expected to generate appropriate enough test cases to ensure the classes are collaborated correctly with each other.

7.1 Deliverables

Deliverable	Responsibility	Completion Date
Develop Test cases	Tester(s)	*2/06/2019*
Test Case Review	Tester(s)	*10/06/2015*
Develop Automated test suites	Tester(s)	TBA
Requirements Validation Matrix	TM	TBA
Obtain User ids and Passwords for payroll system/database	TM	TBA
Execute manual and automated tests	Tester(s) & TM	TBA
Complete Defect Reports	Everyone testing the product	On-going
Document and communicate test status/coverage	TM	Weekly
Execute Beta tests	Team NAG	TBA
Document and communicate Beta test status/coverage	Team NAG	TBA
Execute User Acceptance tests	Team NAG	TBA
Document and communicate Acceptance test status/coverage	Team NAG	TBA
Final Test Summary Report	TM	TBA

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8 Risks

8.1 Schedule

The schedule for each phase is very aggressive and could affect testing. A slip in the schedule in one of the other phases could result in a subsequent slip in the test phase. Close project management is crucial to meeting the forecasted completion date.

8.2 Technical

Since this is a new Management System, in the event of a failure the old system can be used. We will run our test in parallel with the production system so that there is no downtime of the current system.

8.3 Management

TM support is required so when the project falls behind, the test schedule does not get squeezed to make up for the delay. TM can reduce the risk of delays by supporting the tester(s) throughout the testing phase and assigning people to this project with the required skills set.

8.4 Personnel

Due to the aggressive schedule, it is very important to have experienced tester(s) on this project. Unexpected turnovers can impact the schedule. If attrition does happen, all efforts must be made to replace the experienced individual

8.5 Requirements

The test plan and test schedule are based on the current Requirements Document. Any changes to the requirements could affect the test schedule and will need to be approved by the CCB.

9 Tools

Visual testing in the working application is used to help the testing of the new Management System.

10 Documentation

The following documentation will be available at the end of the test phase:

- Test Plan
- Test Cases

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- Test Case review
- Defect reports
- Final Test Summary Report

**Note: at this stage we are only carrying out the Unit Testing.

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Test case id	Test case description	Reason to test in business context	Data input	Expected result	Date/time/ duration	Resources Required	Actual result	Pass / Fail	Action
1	Add new Administrator	New Administrators are required to maintain the system	Username, Password, FirstName, LastName, Email	Record added into the database	29/06/2019 13:50 – 13.50	N/A	Record added into the database	**Pass**	
2	List all Administrators	Overview of all Administrators	Click on Administrators	List of all records	29/06/2019 13:51 – 13.51	N/A	List of all records	**Pass**	
3	List one Administrator	When editing we need to see only one record	Click on update	Records by Id	29/06/2019 13:52 – 13.52	Record ID	Records by Id	**Pass**	
4	Update an Administrator	Information changes over time	Username, Password, FirstName, LastName, Email	Record updated in the database	29/06/2019 13:53 – 13.53	Record ID	Record updated in the database	**Pass**	
5	Delete an Administrator	Administrators might loose their privileges to maintain the system.	Click on Delete	Record deleted from Database	29/06/2019 13:54 – 13.54	Record ID	Record deleted from Database	**Pass**	
6	Add new Lecturer	New Lecturers are required to operate the system	Username, Password, FirstName, LastName, Email	Record added into the database	29/06/2019 13:55 – 13.55	N/A	Record added into the database	**Pass**	
7	List all Lecturers	Overview of all	Click on	List of all	29/06/2019	N/A	List of all	**Pass**	

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		lecturers	Lecturers	records	13:56 – 13.56		records		
8	List one Lecturer	When editing we need to see only one record	Click on update	Records by Id	29/06/2019 13:57 – 13.57	Record ID	Records by Id	**Pass**	
9	Update a Lecturer	Information changes over time	Username, Password, FirstName, LastName, Email	Record updated in the database	29/06/2019 13:58 – 13.58	Record ID	Record updated in the database	**Pass**	
10	Delete a Lecturer	Lecturers might loose their privileges to operate the system.	Click on Delete	Record deleted from Database	29/06/2019 13:59 – 13.59	Record ID	Record deleted from Database	**Pass**	
11	Add new Student	New Students are enrolled every semester the system	Username, Password, FirstName, LastName, Email	Record added into the database	29/06/2019 14:00 – 14.00	N/A	Record added into the database	**Pass**	
12	List all Students	Overview of all students	Click on Students	List of all records	29/06/2019 14:01 – 14.01	N/A	List of all records	**Pass**	
13	List one Student	When editing we need to see only one record	Click on update	Records by Id	29/06/2019 14:02 – 14.02	Record ID	Records by Id	**Pass**	
14	Update a Student	Information changes over time	Username, Password, FirstName, LastName, Email	Record updated in the database	29/06/2019 14:03 – 14.03	Record ID	Record updated in the database	**Pass**	
15	Delete a Student	Students are only enrolled while studying	Click on Delete	Record deleted from Database	29/06/2019 14:04 – 14.04	Record ID	Record deleted from Database	**Pass**	

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16	Export to PDF	The information must be sent via email	Click on PDF	PDF File	29/06/2019 14:08 – 14.08	List of Data to export	PDF File	**Pass**	
17	Search by keyword	The quantity of records requires a way to search for one	Input keywords	List of all matching records	29/06/2019 14:09 – 14.09	List of Data to visualize	List of all matching records	**Pass**	

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11 Approval

Name (Print)	Signature	Date
1.Gonzalo Soto	GS	29/06/19
2.		
3.		
4.		
5.		

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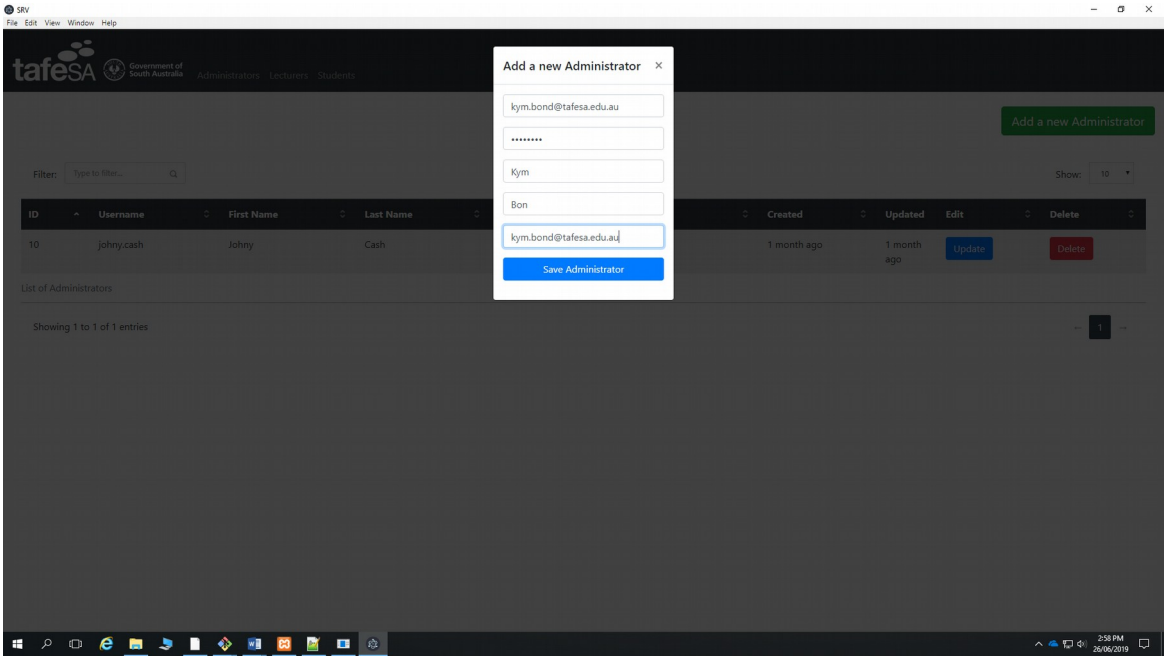
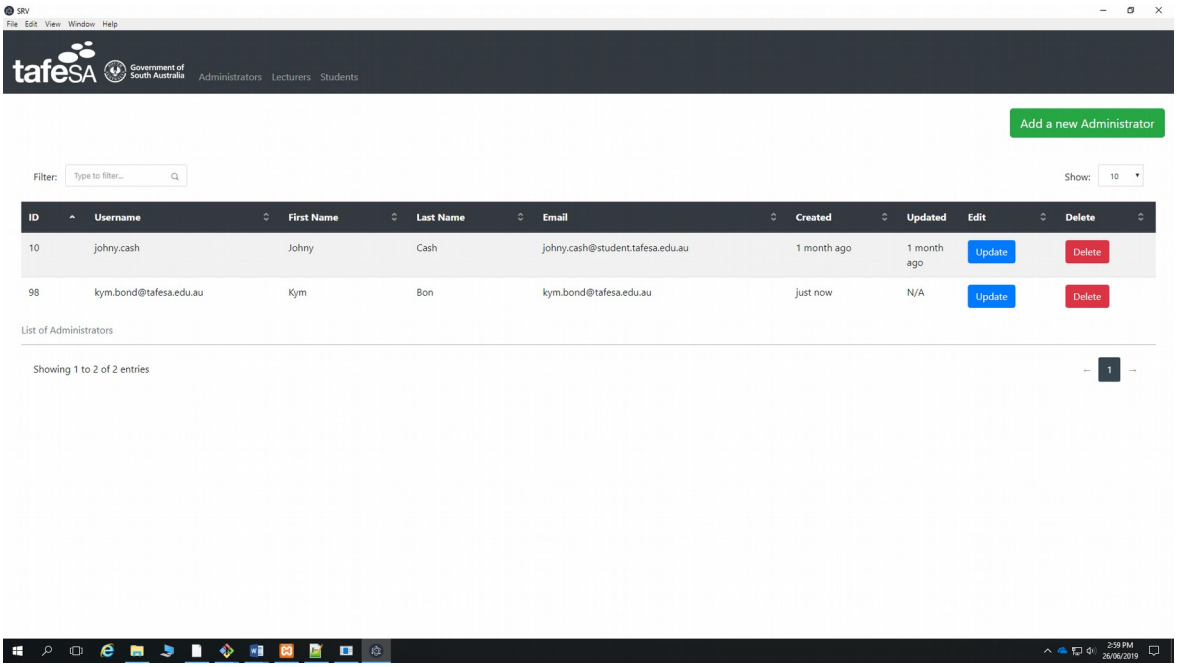
12 Appendix

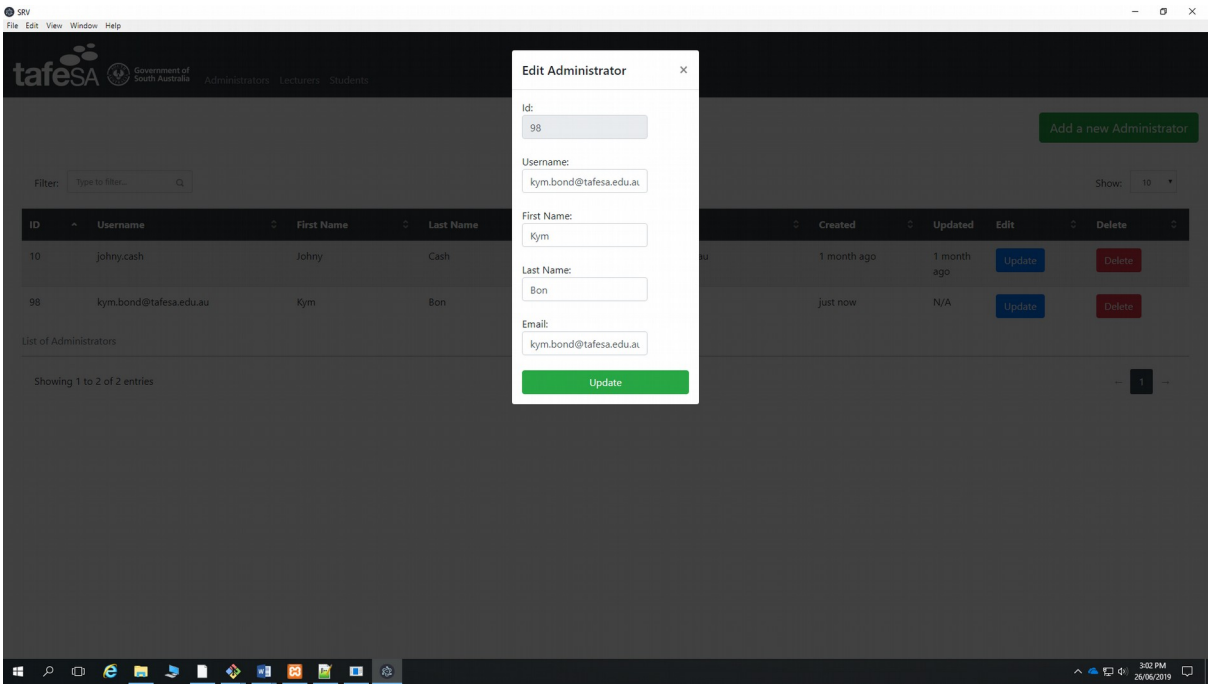
Test Case 1. Add new Administrator



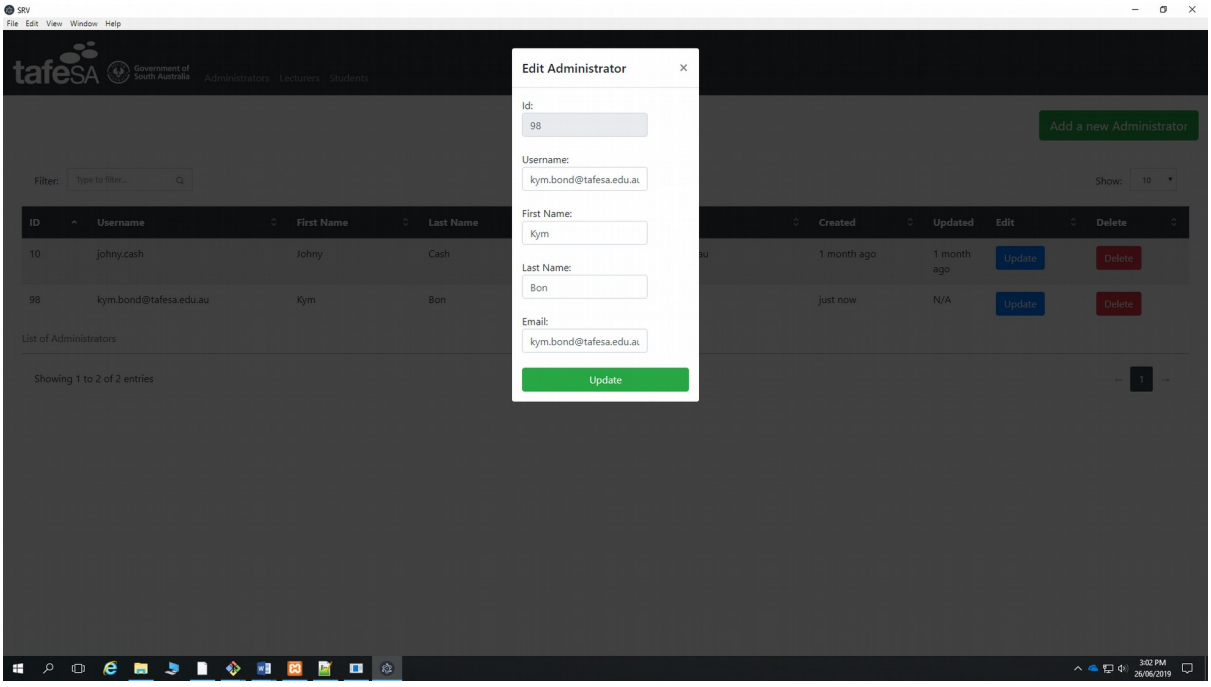
Test Case 2. List all Administrators



Test Case 3. List one Administrator



Test Case 4. Update an Administrator



Test Case 5. Delete an Administrator

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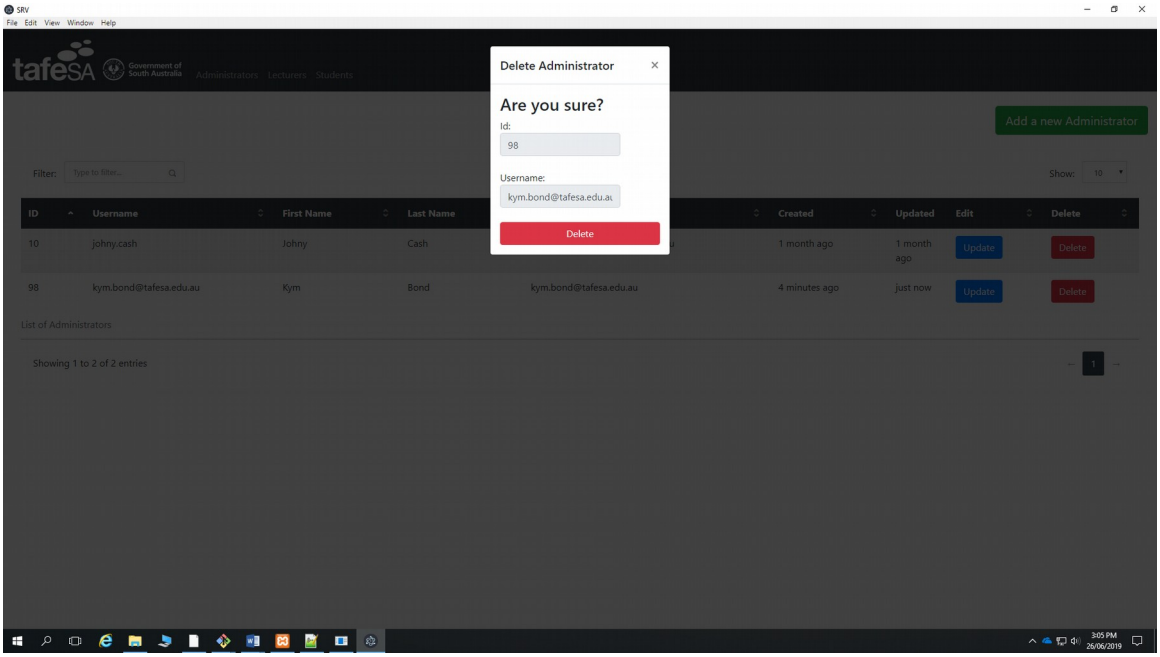
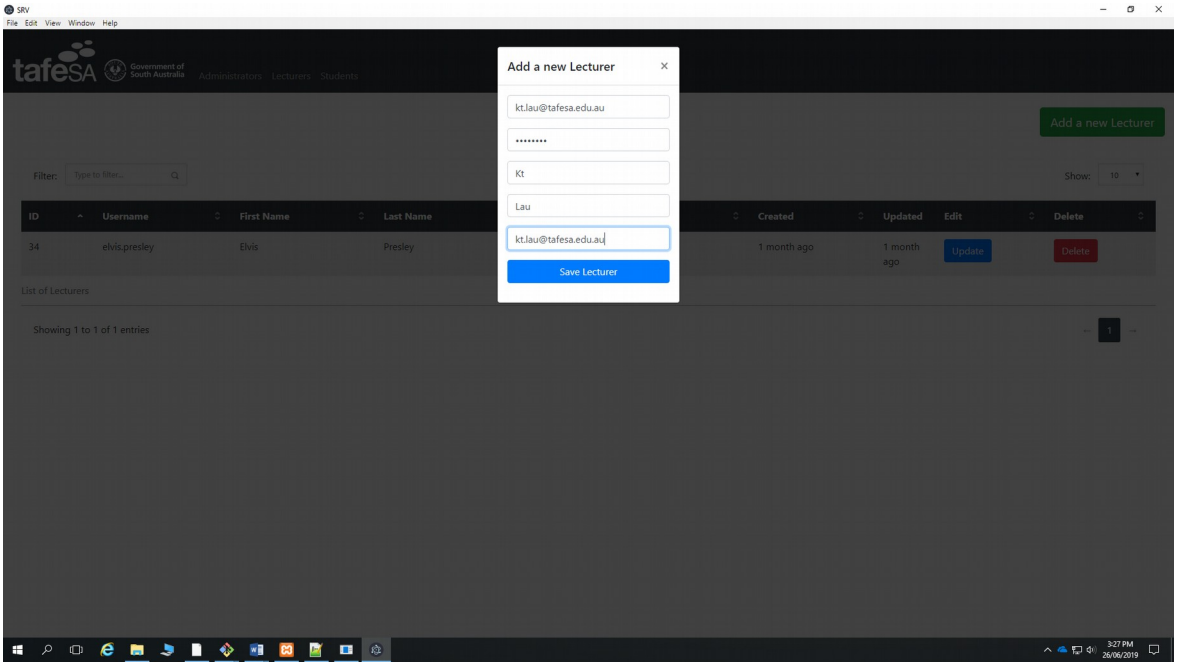
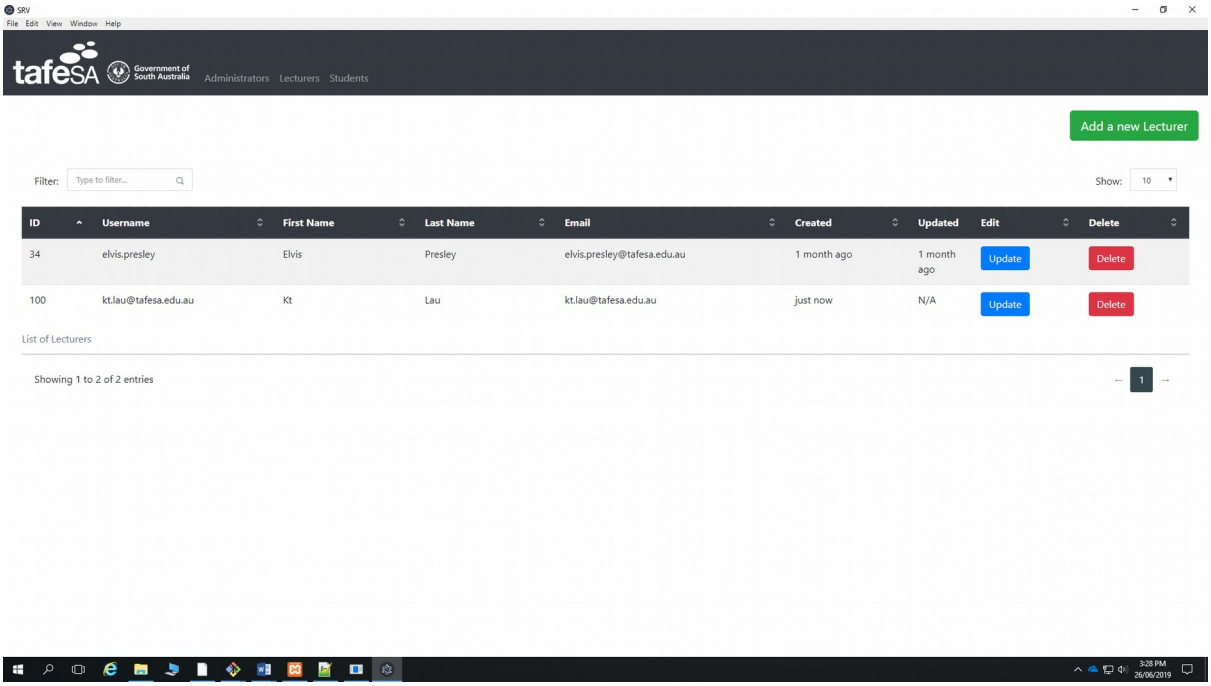


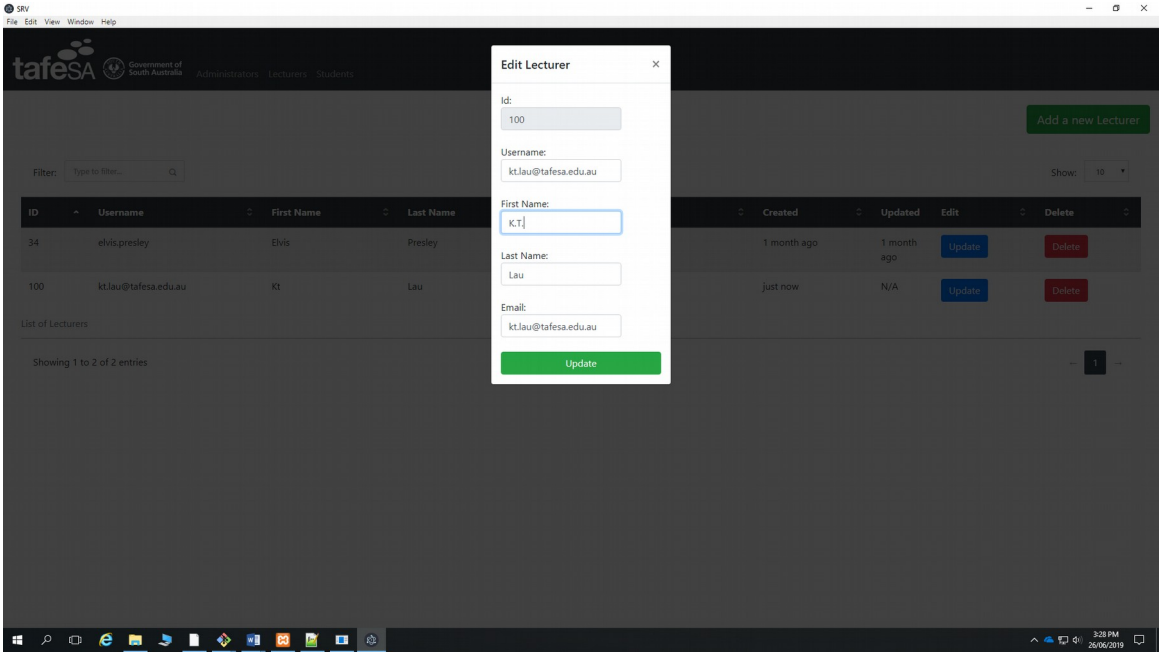
Test Case 6. Add new Lecturer



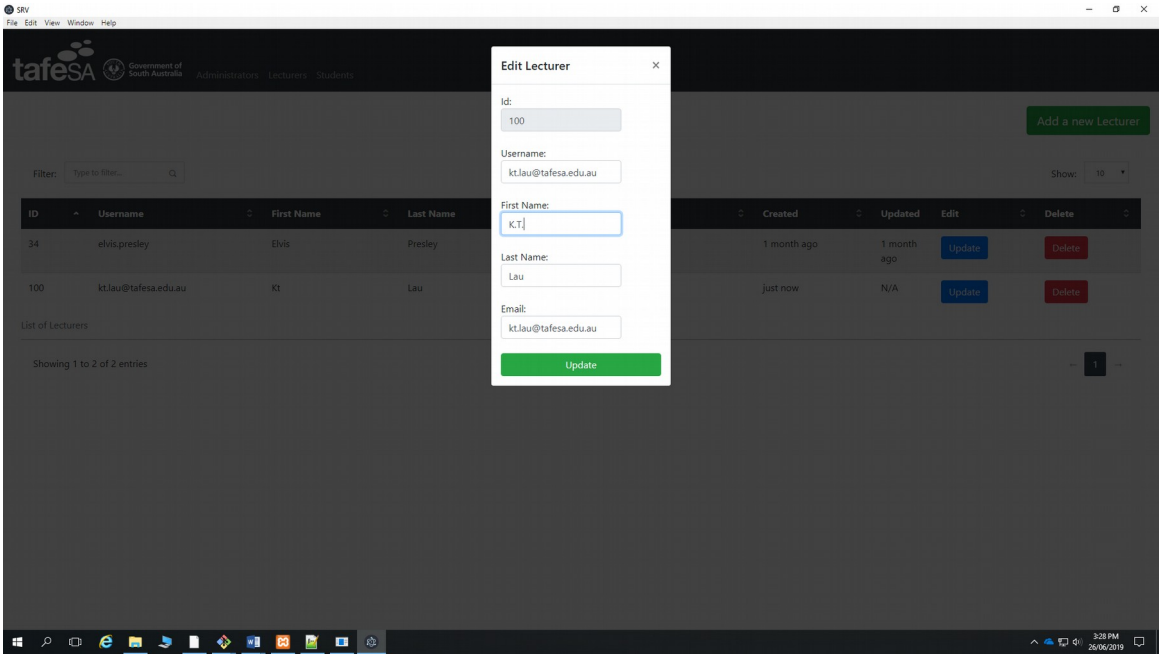
Test Case 7. List all Lecturers



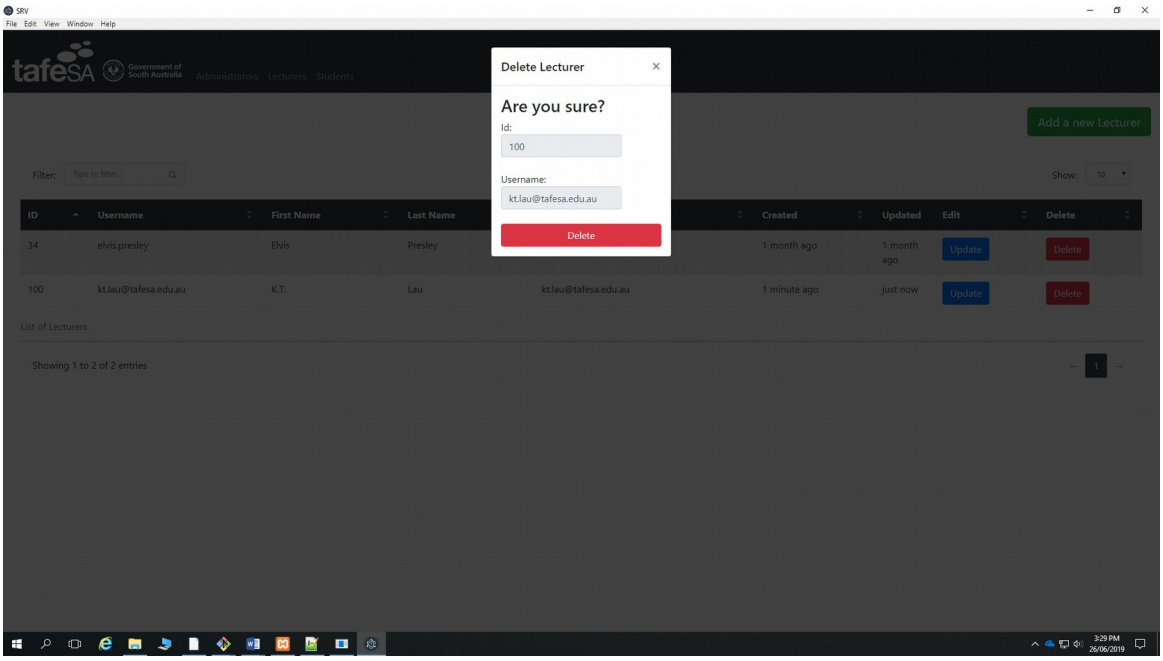
Test Case 8. List one Lecturer



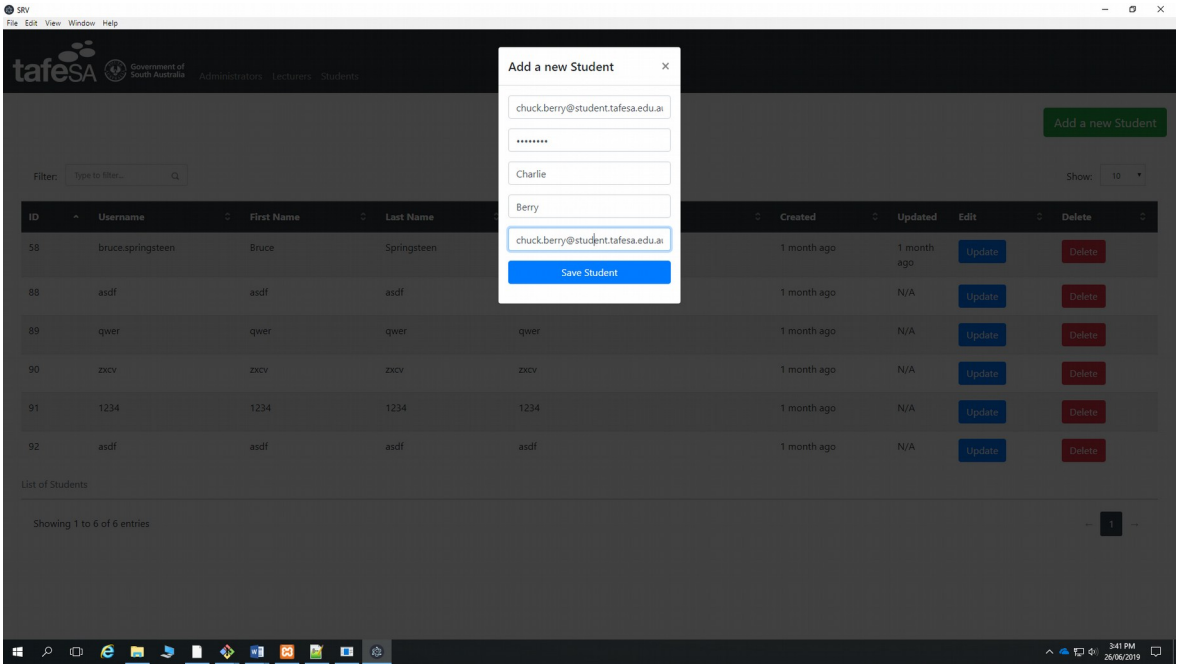
Test Case 9. Update a Lecturer



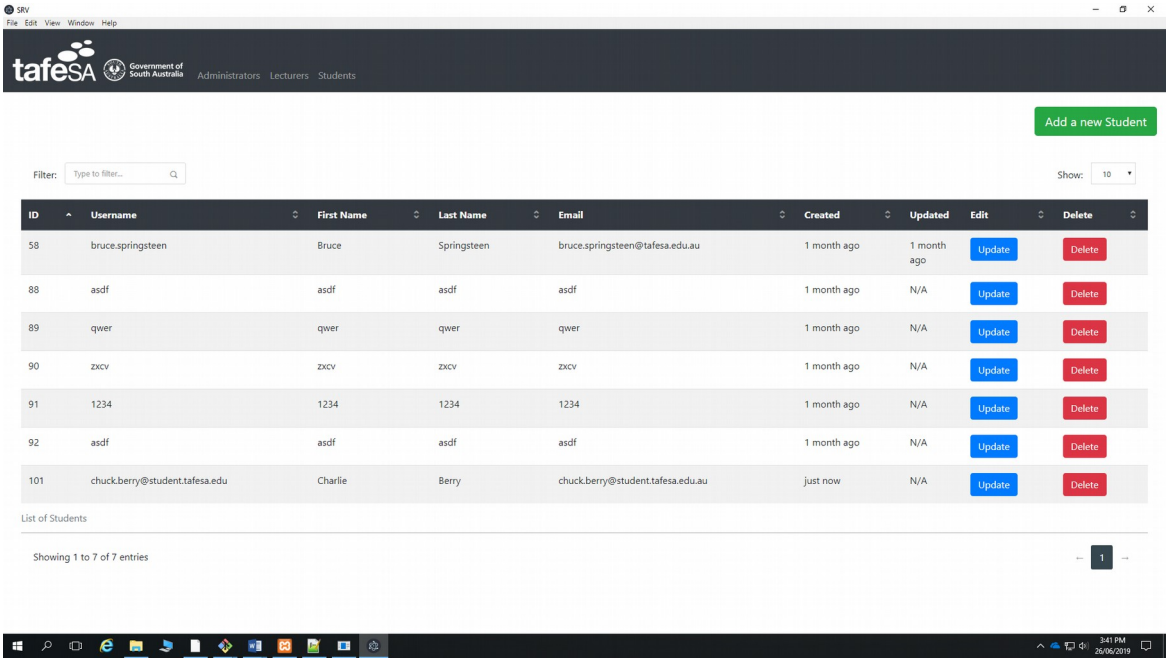
Test Case 10. Delete a Lecturer



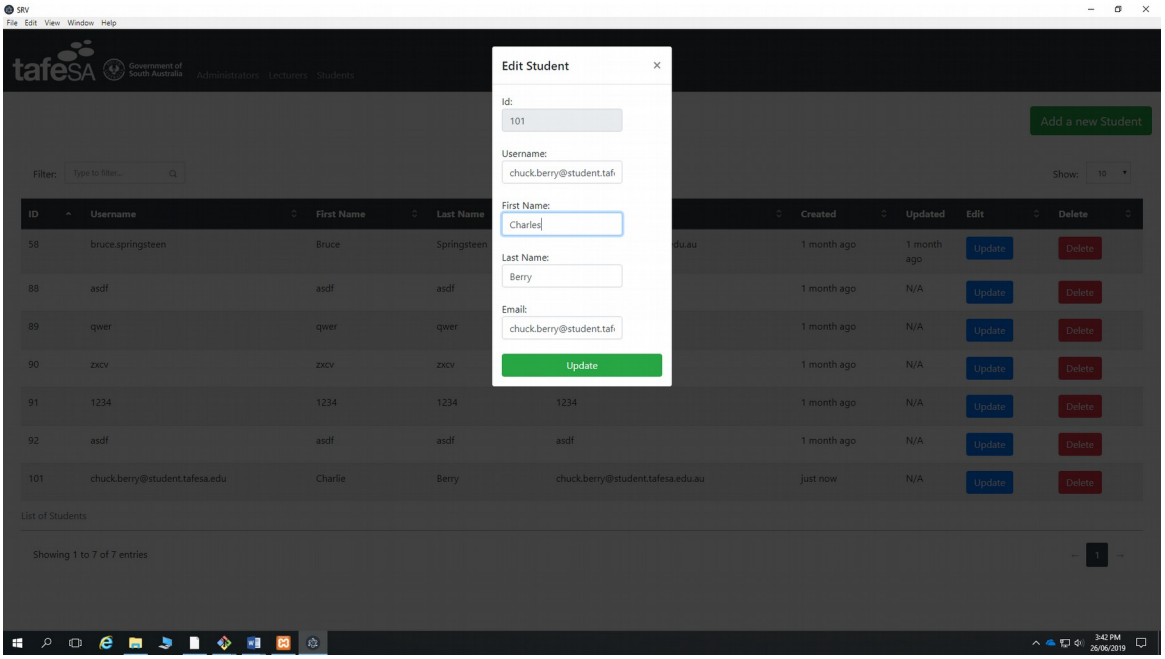
Test Case 11. Add new Student



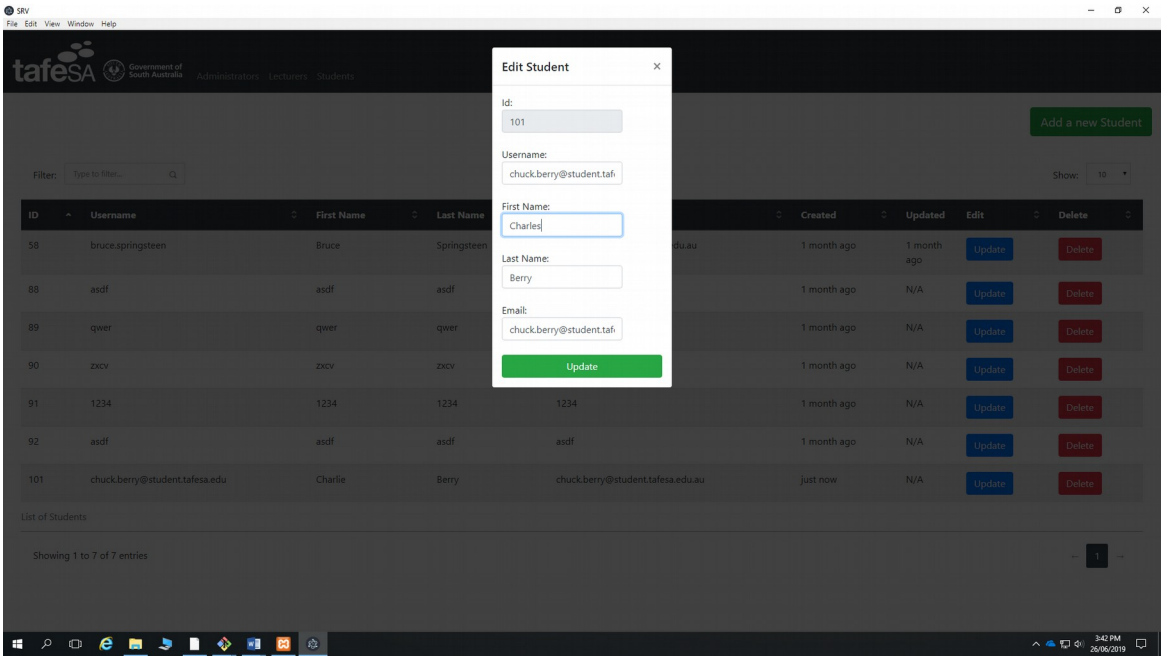
Test Case 12. List all Students



Test Case 13. List one Student



Test Case 14. Update a Student



Test Case 15. Delete a Student

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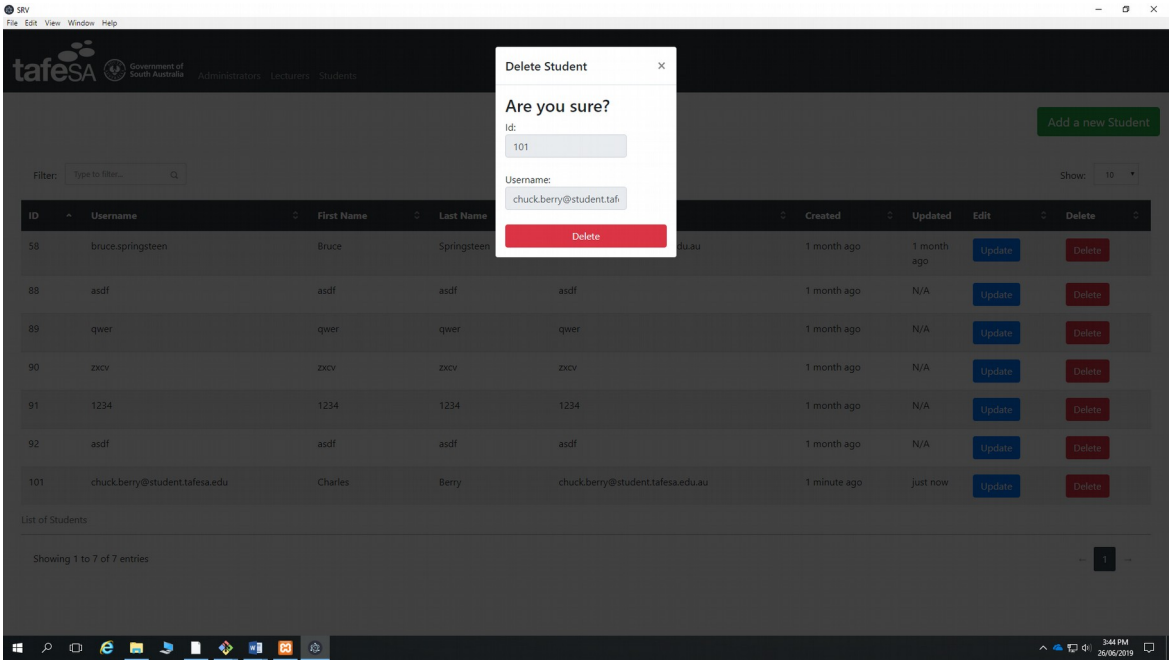
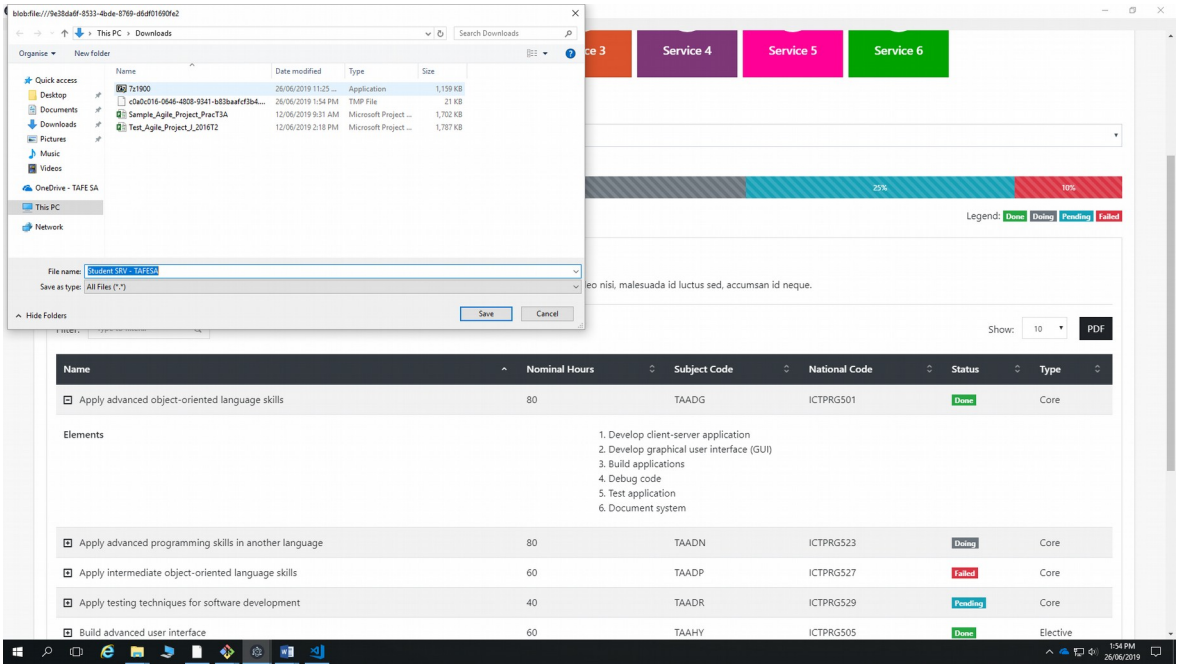
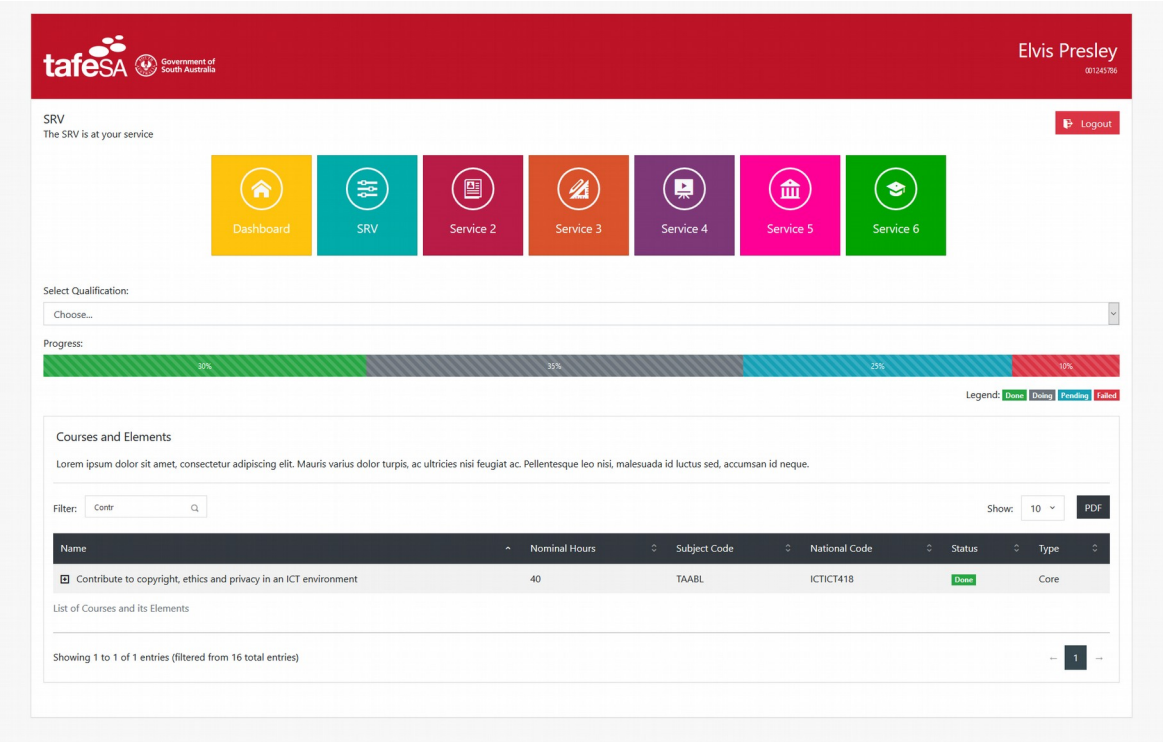


Test Case 16. Export to PDF



Test Case 17. Search by keyword


tafeSA
Government of South Australia
Elvis Presley
00124786
SRV
The SRV is at your service
Logout
Dashboard
SRV
Service 2
Service 3
Service 4
Service 5
Service 6
Select Qualification:
Choose...
Progress:
30%
35%
25%
10%
Legend: Done Doing Pending Failed
Courses and Elements
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris varius dolor turpis, ac ultricies nisi feugiat ac. Pellentesque leo nisi, malesuada id luctus sed, accumsan id neque.
Filter: Contr
Show: 10
PDF
Name
Nominal Hours
Subject Code
National Code
Status
Type
Contribute to copyright, ethics and privacy in an ICT environment
40
TAABL
ICTICT418
Done
Core
List of Courses and its Elements
Showing 1 to 1 of 1 entries (filtered from 16 total entries)
1