

Course: COMP1643
Information and Content Management

Submitted to	Submitted by
University of Greenwich, UK Course Leader: Annemarie Zijlema	Username: ma4476a Banner id: 001121090

Banner ID	Team Role
001121705	Analyst
001121406	Scrum Master and Designer
001087354	Developer
001121090	Tester(me)

Screencast Link	
Repository Link	
Website Link	daiacmcw.sharepoint.com/sites/Bristol9

Table of Contents

Introduction:	3
System Functionality.....	3
Mark Evaluation:.....	3
1. Test Plan:.....	6
2. Test Design:.....	7
3. Test Logs:.....	8
2. Test	9
2.1 Unit Testing:.....	9
2.2 Functional Testing	12
2.3 Integration Testing	14
2.4 Usability Testing	20
2.5 Cross Browser Testing	22
2.6 Responsive Testing:.....	24
2.7 Security Testing:.....	27
Conclusion.....	29
Bibliography	30

Introduction:

content management system in this course we are develop a university website with team work. Our team consist of five members. Every member has various role, this rule is Analyst, UI designer, developer, scrum master and tester. In this team I am play a tester role. Testing is most valuable part any software development. At the end of the testing part a system gets perfection. Tester checked the system functionalities, requirements and find out vulnerabilities. This system I am testing some test these are unit testing, functional, usability, security, responsive, cross browser and integration testing.

System Functionality: About our framework usefulness quality and shortcoming given underneath.

Strength:

Made sure about login structure

Confirmed the Enquiries structure

Confirmed the book and arrangement structure

Safely download the transferred document

Confirmed the client mail

Weakness:

There have no two stage validation frameworks. Not easy to understand. and having some responsive problem. like mobile view and Tablet view.

Mark Evaluation:

Performance of group evaluation	Mark Evaluation
Fully committed	10
Committed	8
Contribute substantially	6
Contribute Partially	4
Minimal Contribution	2
No Contribution	0

Scoring of 001121705

Performance Evaluation	Fully Committed	Committed	Contribute Substantially	Contribute Partially	Minimal Contribution	No Contribution
Group Meeting Attendance	✓					
Technical Knowledge		✓				
Communication	✓					
Contribution		✓				
Punctuality		✓				
Friendliness	✓					
Comments	He Plays his role Properly. Good Communication. Very Friendliness person in our Group.					

Scoring of 001121406

Performance Evaluation	Fully Committed	Committed	Contribute Substantially	Contribute Partially	Minimal Contribution	No Contribution
Group Meeting Attendance	✓					
Technical Knowledge		✓				
Communication	✓					
Contribution	✓					
Punctuality	✓					
Friendliness	✓					
Comments	A man of hard work. He work good					

Scoring of 001087354

Performance Evaluation	Fully Committe d	Committe d	Contribute Substantialit y	Contribut e Partially	Minimal Contributio n	No Contributio n
Group Meeting Attendance	✓					
Technical Knowledge	✓					
Communication		✓				
Contribution		✓				
Punctuality	✓					
Friendliness						
Comments	He develops our website carefully. He is most efforted person in our group					

Scoring of 001121090

Performance Evaluation	Fully Committe d	Committe d	Contribute Substantialit y	Contribut e Partially	Minimal Contributio n	No Contributio n
Group Meeting Attendance	✓					
Technical Knowledge	✓					
Communication	✓					
Contribution		✓				
Punctuality		✓				
Friendliness	✓					
Comments	I am attempting to my best assume my job. I am consistently correspondence with my all colleagues. I thing completed my errand effectively.					

1. Test Plan:

A test plan simply indicates the scopes and boundaries of software testing and what approaches will be undertaken and how resources will be utilized. (Test Plan, 2020)

After configuring each system, a variety of test activities have to be performed on that system. This type of test is needed because the final products are meeting the user's requirement. A good test confirms the final quality of the product and whether it is suitable for use. Before I am start testing our system, I have set some criteria to get the testing parts done well. This test plan is given below:

Test No	Name	Specification	Outcomes
1	Unit-Test	Check all Form and Comment Section,	Properly worked
2	Integration	Check the link Repository, business and partnership, about, Research, people, News Page, Schools and Faculties, study at Bristol, music, schools of arts in the menu-bar.	This testing result show the outcome appropriately.
3	Functional	Checking business and partnership page comment option. With input data and without data.	This Function work appropriately and easily. Show anticipated outcome.
4	Usability	Checking the search bar. Checking navigation bar and user role.	Anticipated outcome
5	Security	Using Havij Tool for Testing SQL Injections. And also checking Microsoft Forms Data.	Expected Result
6	Browser Compatibility	Opened from Internet Explores and Google Chrome Browser.	Show the outcome Expected
7	Responsive	This site opens easily Laptop, Tab and Mobile Phone	Expected

2. Test Design:

Test design signifies how testing should occur and the processes associated with identifying test cases by describing each steps and conditions. (Test Design, 2020)

this is university websites. It's mainly 3 users, every user has different work. I am designing the test design on this website. given in the below test design plan.

- 1. Unit testing.**
- 2. Functional Testing.**
- 3. Integration Testing.**
- 4. Security Testing.**
- 5. Usability Testing.**
- 6. Cross Browser Testing.**
- 7. Responsive Testing.**

3. Test Logs:

Test log is one of the critical test curios arranged during the way toward testing. It gives a nitty gritty synopsis of the general trial and demonstrates the finished and bombed assessments. Moreover, the test log likewise contains subtleties and data about different test activities, including the cause of issues and the purposes behind bombed tasks. The focal point of this report is to empower the post-execution finding of disappointments and deformities in the product. (Test Log, 2020)

Test no	Test Name	Criteria	Outcomes	Result
1	Unit Testing	Checking Feedback form in our Site	Feedback Form can work properly	Passed
2	Integration Testing	Checking all page. Which is integrated another page	Its work properly	Passed
3	Functionality Testing	Check all comments section.	Correctly create post and properly work reply section	Passed
4	Usability Testing	Check Navigation bar and Search box	Verry well	Passed
5	Security Testing	Testing SQL	Very well	Passed
5.1	SQL Injection	Using Havij Testing Tool	Successfully Test SQL Injection	Passed
5.2	XSS			
5.3	CSRF			
6	Browser Compatibility test	this site functions admirably in all program	Very good	Passed

7	Responsive Test	Site goal lovely in all device	Good	Passed
---	-----------------	--------------------------------	------	--------

2. Test

2.1 Unit Testing:

Unit testing is taken into consideration to judge each block of codes or modules to see if they are performing as they should be and if a developer is capable enough to operate those modules by himself. (Tutorials Point, 2020)

However, the principal point is to disconnect every unit of the framework to distinguish, investigate and fix the imperfections.

Id	Title	Pre-condition	Test Step	Actual Result	Expected
1	Feedback Form	Must be access in our Site	Must be Click Feedback Button	User can easily View the form	Expected result
2	Feedback form	Must me input data	Must be insert data in the form. and press the submit button.	Users Easily insert data in the form	Showing Data Store Thanks!

The screenshot shows a SharePoint feedback form titled "Feedback". The page has a red header bar with the "Bristol" logo and navigation links for Home, Study at Bristol, About, Schools & faculties, Research, Business & partnerships, News, People & contacts, and Edit. A search bar is at the top right. Below the header, there's a toolbar with New, Send by email, Promote, Page details, Not following, Share, and Edit buttons. The main content area is titled "Feedback" and contains a "Feedback" section. It includes a note about reporting problems or contacting the university. A message states: "Hi Liad, when you submit this form, the owner will be able to see your name and email address." There are three required fields: "1. Your full name: (required)" with an input field containing "Enter your answer", "2. Email address: (required)" with an input field containing "Enter your answer", and "3. Message: (required)" with an input field containing "Enter your answer". A blue "Submit" button is at the bottom.

Figure 1 Showing feedback Form

This screenshot is identical to Figure 1, showing the same feedback form on a SharePoint site. However, it illustrates data being entered into the fields. The "1. Your full name" field contains "Tester", the "2. Email address" field contains "Tester@daffodil.ac", and the "3. Message" field contains "Hello world!!!". The rest of the page, including the header, toolbar, and submission button, remains the same.

Figure 2 Data Insertion

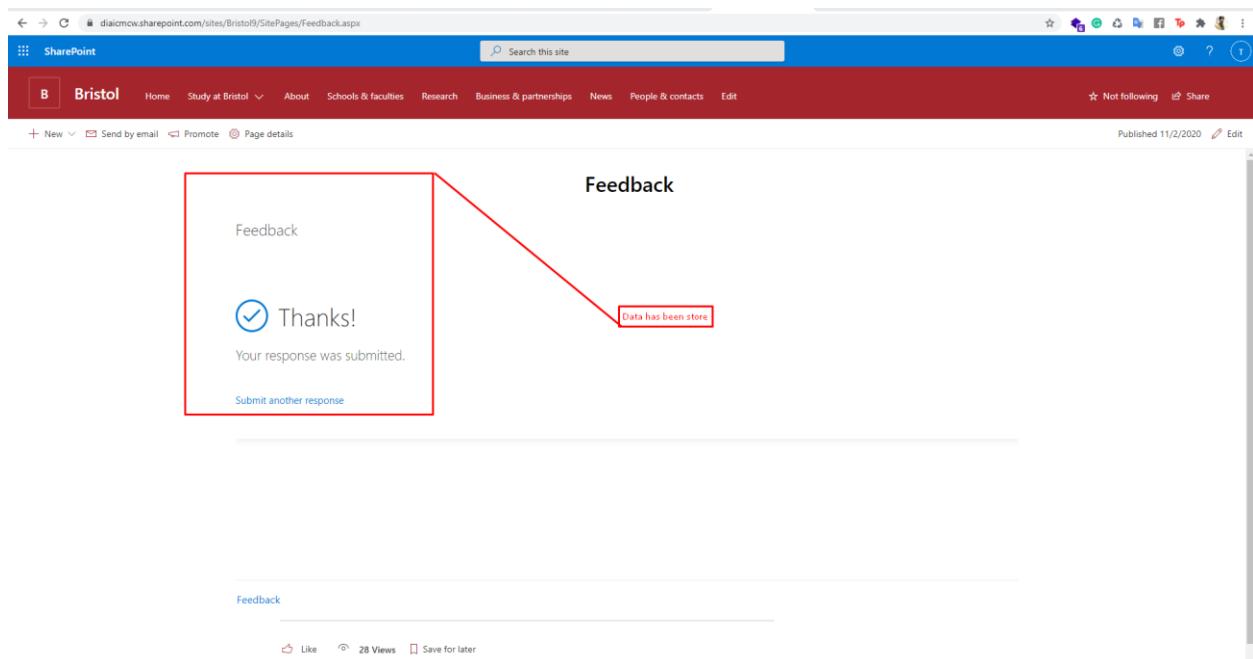


Figure 3 data has been stored

2.2 Functional Testing

Functional testing is commenced to ensure it stands on par with the functions of the system specification and black box method is adopted to continue with the functional testing procedures. (Software Testing Fundamentals, 2020)

The reason for Functional tests is to test each function of the product application, by giving suitable information, confirming the yield against the Functional necessities.

Id	Title	Pre-condition	Test Step	Actual Result	Expected
1	Business and Partnership	Must be choose business and partnership page	Click the field and type any Comments and click the post button.	Comment has been added our site. Any user can reply and give like this post.	Showing comment and read.

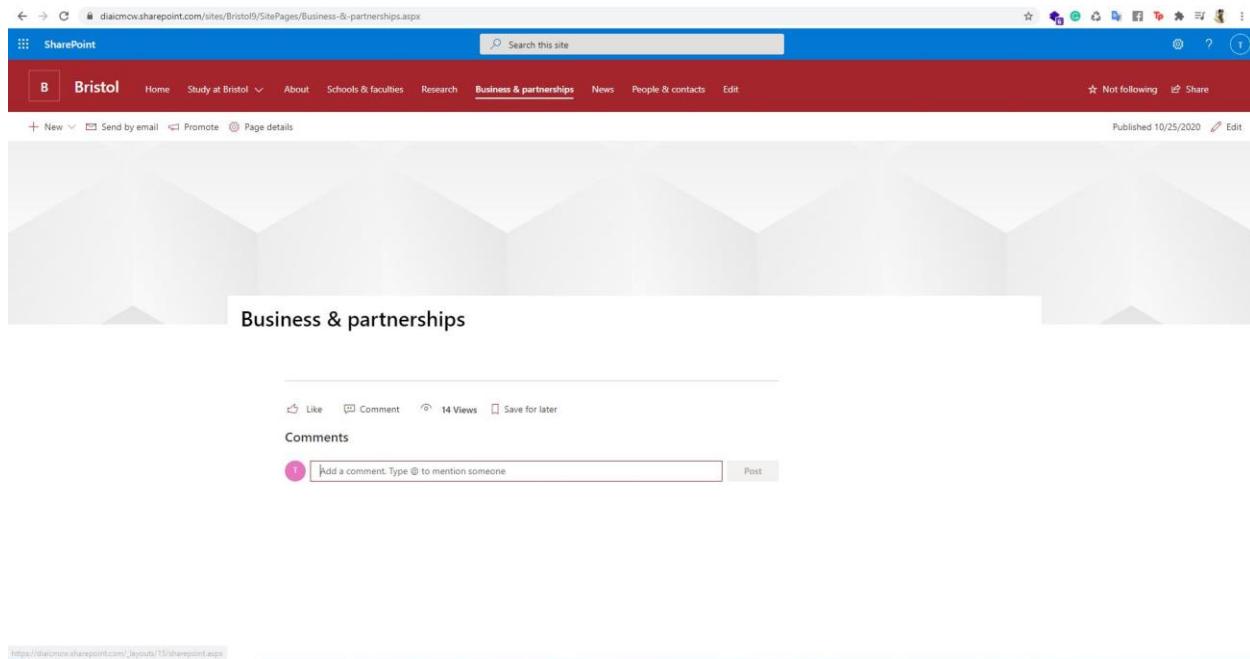


Figure 4 Business and Partnership page Comment Section

The screenshot shows a SharePoint page titled "Business & partnerships". The page has a red header with the site name "Bristol" and various navigation links. Below the header is a large, light gray geometric background image. In the center, there is a white rectangular area containing the title "Business & partnerships". Below the title is a horizontal line with social sharing icons: Like, Comment, Views (14), and Save for later. A "Comments" section follows, featuring a comment input field with the placeholder "i want to know more about business and partnership System" and a "Post" button.

Figure 5 type Comment

This screenshot shows the same SharePoint page after a comment has been posted. The "Comments" section now displays one comment from a user named "Tester" (now). The comment text is "i want to know more about business and partnership System". Below the comment are standard reply and like buttons.

Figure 6 Post has been added

2.3 Integration Testing

The importance of Integration testing is very clear. Coordination the unit tried module individually and test the conduct as a consolidated unit.

The primary capacity or objective of this testing is to test the interfaces between the units (What is Integration Testing, 2020)

Id	Title	Pre-condition		Test Step	Actual Result	Expected
1	About to Our Research Page	User Must select About page	Click About Page and Choose the Our Research Button.		About page integrated to Our research Page	Expected Result
2	News Page	Must click News Page	Just Click News Page		Showing all the news	Expected result
3	Schools and Faculties	Click Schools and Faculties	Go to the schools and Faculties section and choose schools of Arts or Music		It is very easy to go from one page to another page.	Expected Result
4	People and Contacts	Must be Select People Contact Page	Click people and Contact page		After go the people and contact page and showing information	Showing properly all Contact information
5	Study at Bristol	Users must choose	Just Hover the mouse cursor in the study at Bristol section		showing Three Category information.	Expected Result

		Study at Bristol		User can easily access the menu and choose option	
6	Research	Must Click the Research Page	Click the Research Section	Easily access the Research Page	Expected Results

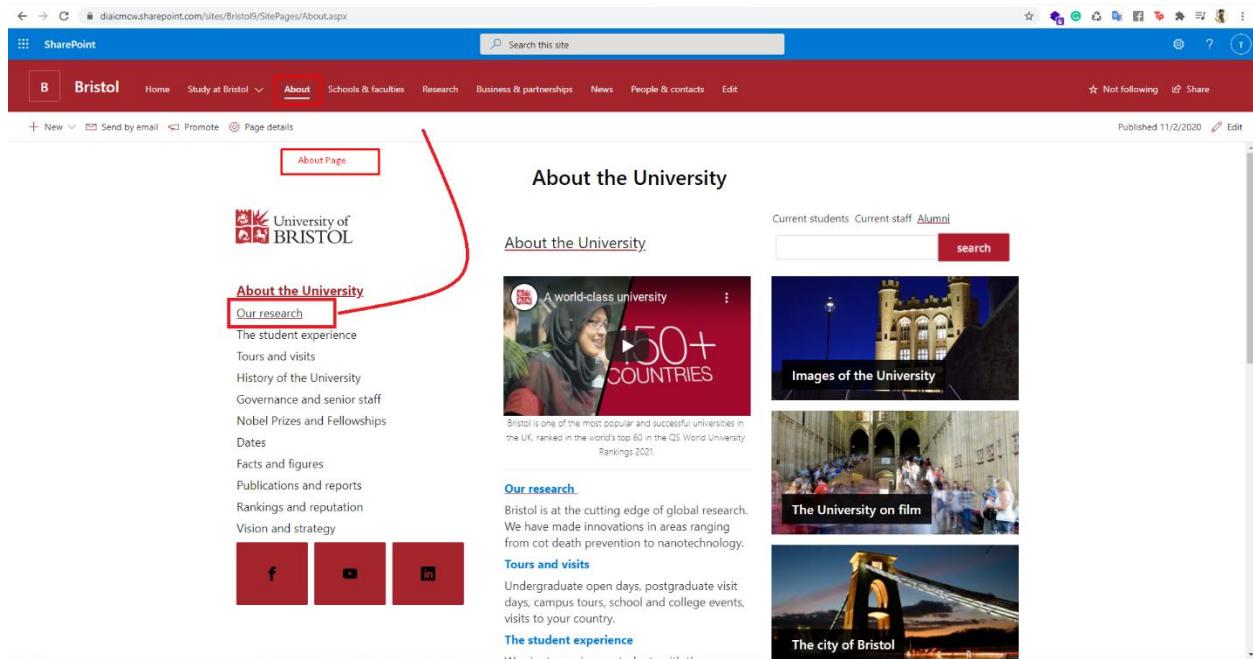


Figure 7 Opening About Page

The screenshot shows the University of Bristol's Research page on a SharePoint site. The top navigation bar includes links for Home, Study at Bristol, About, Schools & faculties, Research (which is highlighted with a red box), Business & partnerships, News, People & contacts, and Edit. Below the navigation is a search bar and a status bar indicating 'Published 11/2/2020' and 'Edit'. The main content area features a large image of a scientist in a lab coat and safety glasses. Below the image is a section titled 'Research at Bristol' with a video thumbnail. To the right, there is a news item with a thumbnail showing two people, the title 'Historic signing is major boost to region's digital future', the date '15 October 2020', and the author 'Mohammad Rahman'.

Figure 8 Integrated Our Research Page

The screenshot shows the University of Bristol's News page on a SharePoint site. The top navigation bar includes links for Home, Study at Bristol, About, Schools & faculties, Research, Business & partnerships, News (which is highlighted with a red box), People & contacts, and Edit. Below the navigation is a search bar and a status bar indicating 'Published 11/2/2020' and 'Edit'. The main content area features a section titled 'News and features' with a list of news items. One news item is shown in detail: 'Historic signing is major boost to region's digital future' by Mohammad Rahman on October 26. To the right, there is a search bar and a sidebar titled 'Tweets by @BristolUni' which shows a tweet from the university's Twitter account.

Figure 9 Showing News page.

[Schools & faculties](#)

Schools and faculties

[Schools and faculties](#)

[Academic schools and research centres by faculty](#)

- Arts**
 - [Schools of Arts](#)
 - Anthropology and Archaeology
 - Film and Television
 - [Music](#)
 - Philosophy
 - Theatre
 - School of Humanities
 - Classics and Ancient History
 - English
 - History (Historical Studies)
 - History of Art (Historical Studies)
 - Religion and Theology
 - School of Modern Languages
 - French
 - German
 - [European Archaeology and Latin](#)
- Engineering**
 - School of Computer Science, Electrical and Electronic Engineering, and Engineering Mathematics
 - Computer Science
 - Electrical and Electronic Engineering
 - Engineering Mathematics
 - School of Civil, Aerospace and Mechanical Engineering
 - Aerospace Engineering
 - Civil Engineering
 - Mechanical Engineering
- Health Sciences**
 - Bristol Dental School
 - Bristol Medical School
 - Population Health Sciences
 - Translational Health Sciences
 - Bristol Veterinary School
 - School of Anatomy
 - Teaching and Learning for Health Professionals
- Social Sciences and Law**
 - School of Accounting and Finance
 - School of Economics
 - School of Education
 - School of Management
 - School for Policy Studies
 - School of Sociology, Politics and International Studies
- Science**
 - School of Chemistry
 - School of Earth Sciences
 - School of Geographical Sciences

Figure 10 Showing Schools and Faculties Page

[Schools & faculties](#)

School of Arts

[School of Arts](#)

[Courses and programmes](#)

[Research](#)

[People](#)

[Events](#)

[Outreach](#)

[Black Lives Matter](#)

[Contacts](#)



A stimulating and challenging study experience

1 of 3

Start of term message from the Head of School

Read the statement here.

Figure 11 Go to Schools of Arts from Schools and Faculties Page

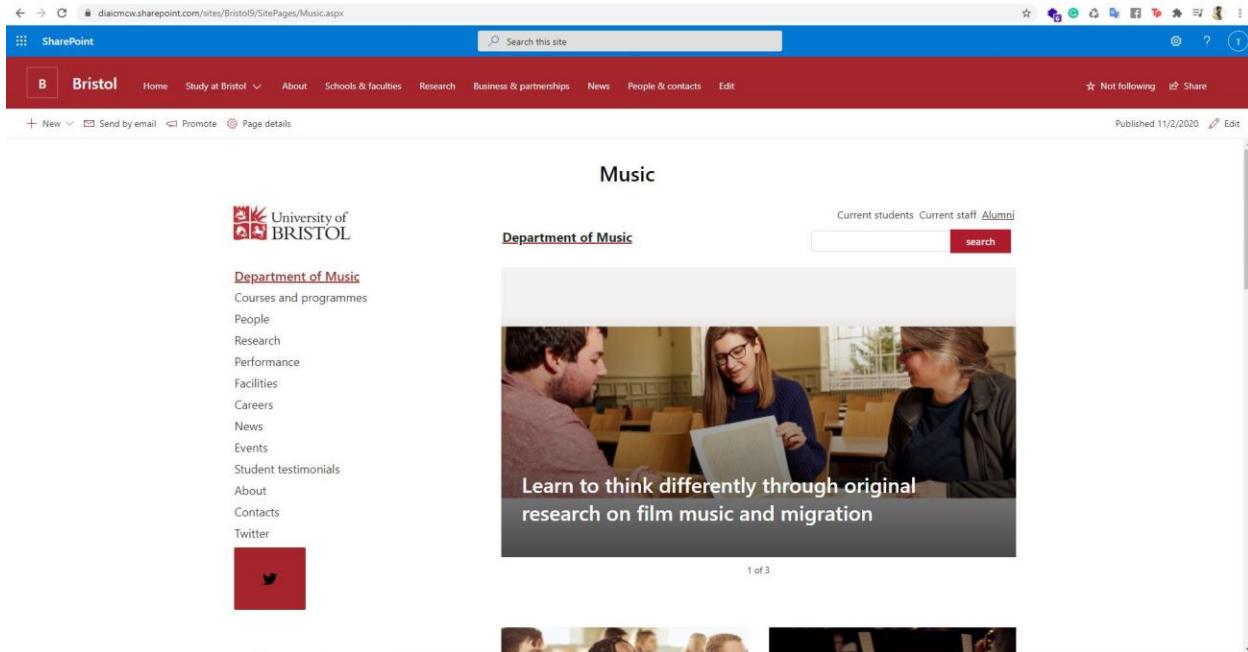


Figure 12 Go to Music Page from Schools and Faculties page

The screenshot shows a SharePoint page titled 'People & contacts' at the University of Bristol. The top navigation bar includes links for Home, Study at Bristol, About, Schools & faculties, Research, Business & partnerships, News, People & contacts, and Edit. A search bar is at the top right. The main content area has a title 'Contacting people' and a sub-section 'Contacting people'. On the left, there's a search form for 'Search for person' and a 'Contact directory' section. The right side is divided into several sections: 'Emergency contacts' (Security Services 24-hour emergency number 0117 331 1223), 'Non-emergency security issues' (0117 928 7848), 'Parent concerns' (information on how to contact students), 'Main address' (University of Bristol, Beacon House, Queens Road, Bristol BS8 1QU, UK), 'Main switchboard telephone' (+44 (0)117 928 9000), 'Maps and travel' (links to campus map and travel information), 'Alumni and donors' (alumni@bristol.ac.uk), and 'Research, business and industry' (link). A red arrow points from the 'People & contacts' link in the top navigation bar to the 'Contacting people' section on the page.

Figure 13 showing People Page

Study at Bristol

Undergraduate study

- Find a course
- Open days and visits
- New undergraduate students

Postgraduate study

- Find a programme
- Visits and open days
- New postgraduate students

Related links

- International students
- Accommodation

Coronavirus: advice and guidance

Postgraduate virtual open weeks

Book Now →

Study at Bristol

Figure 14 showing Study at Bristol

Research

Research Page

Research at Bristol

Our research impact

Historic signing is major boost to region's digital future

15 October 2020 The University of Bristol and BT have joined forces to shape a digital futur...

Mohammad Rahman October 26

Figure 15 showing Research Page

2.4 Usability Testing

User testing incorporates real user feedback to check how flexible a system is to use.

This happens in front of a committee who check and take feedback from the users to see if the feedbacks meet their expectations. (Usability Testing, 2020)

Ease of use testing is the act of testing how simple a plan is to use with a gathering of agent clients. It normally includes watching clients as they endeavor to finish errands and should be possible for various kinds of plans. It is frequently directed consistently, from early improvement until an item's delivery.

Id	Title	Pre-condition	Test Step	Actual Result	Expected
1	User Role	Must be access in our site	Sign in this website with user name and password	Show the user role clearly	Showing the Expected Result
2	Search Bar Option	Must be type the search box	Easily search the any page in our site. Simply search news page	Show the news page in our site clearly	Expected Showing the result

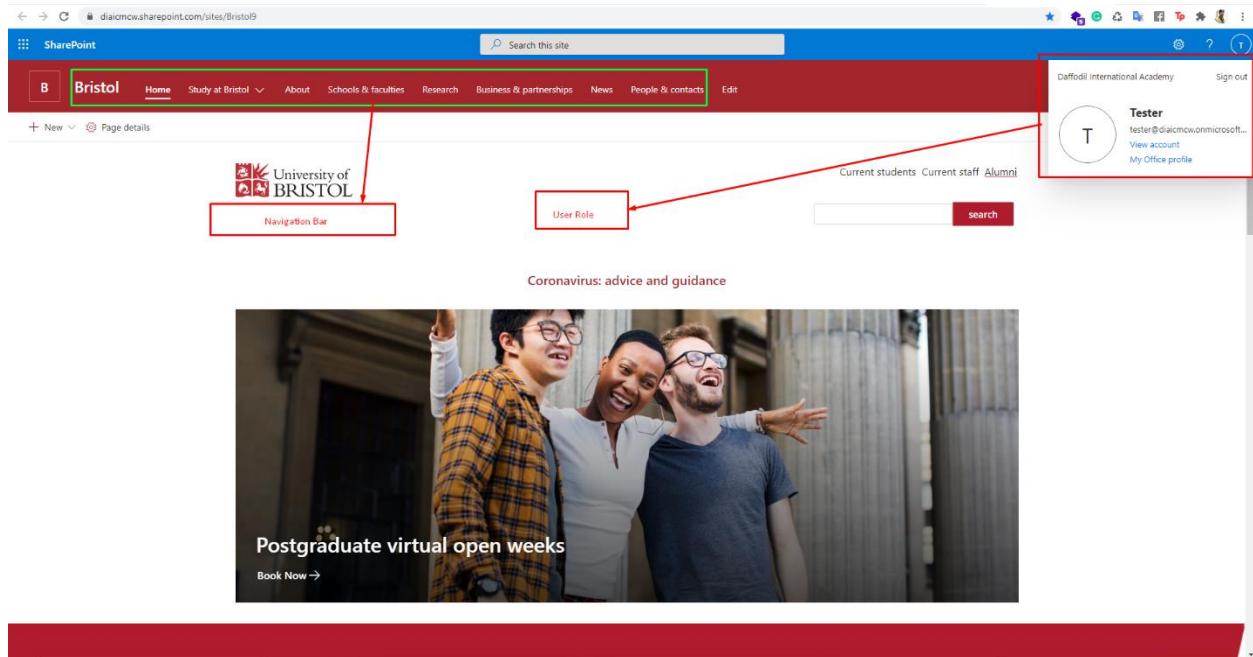


Figure 16 Showing the User role

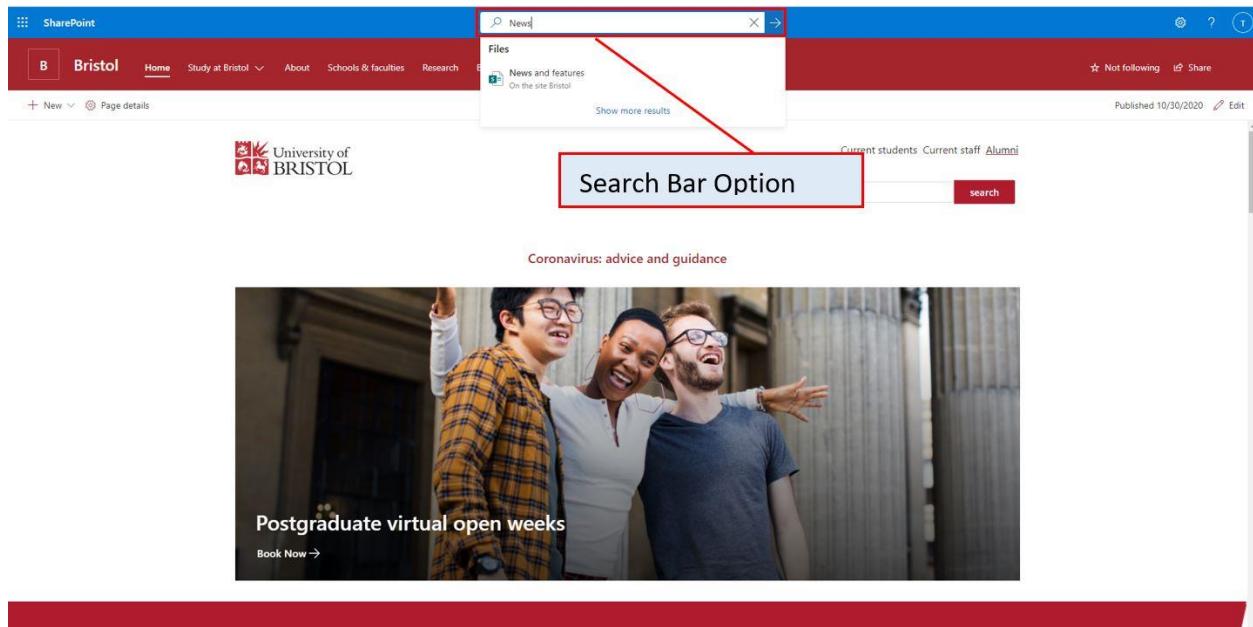


Figure 17 Search News Page

The screenshot shows a SharePoint site for the University of Bristol. The top navigation bar includes links for Home, Study at Bristol, About, Schools & faculties, Research, Business & partnerships, News (which is currently selected), People & contacts, and Edit. A search bar is located at the top right. The main content area is titled "News and features" and displays several news items. On the left, there's a sidebar titled "Browse by category" with links for Research, International, Grants and awards, Obituaries, Student notices, and All news feeds. The news items include titles like "Historic signing is major boost to region's digital future", "World's greatest mass extinction triggered switch to...", and "Deep sea coral time machines reveal ancient CO2 bursts". To the right of the news, there's a search bar and a sidebar titled "Tweets by @BristolUni" which shows a single tweet from the university's official account.

Figure 18 showing the News and Features Page

2.5 Cross Browser Testing

Id	Title	Pre-condition	Test Step	Actual Result	Expected
1	Using Internet Explore	Must open our site	Just sign in our website	Show the home page	It will be to pass the test clearly
2	Using Google Chrome	Open our website	Login with user name and password	Show the home page correctly	It will be to pass the test clearly
3	Using Mozilla Firefox	Must open our website	Login with user name and password	Easily logged in our home page	It will be to pass the test clearly

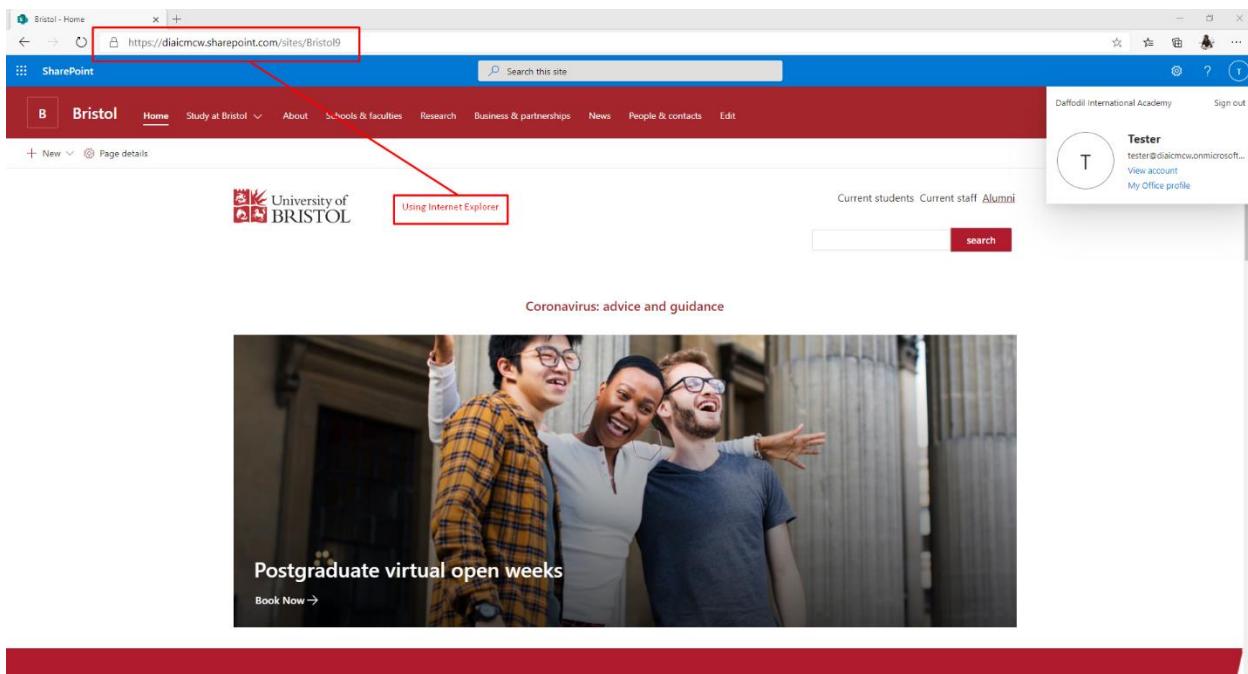


Figure 19 site opening with Internet Explore

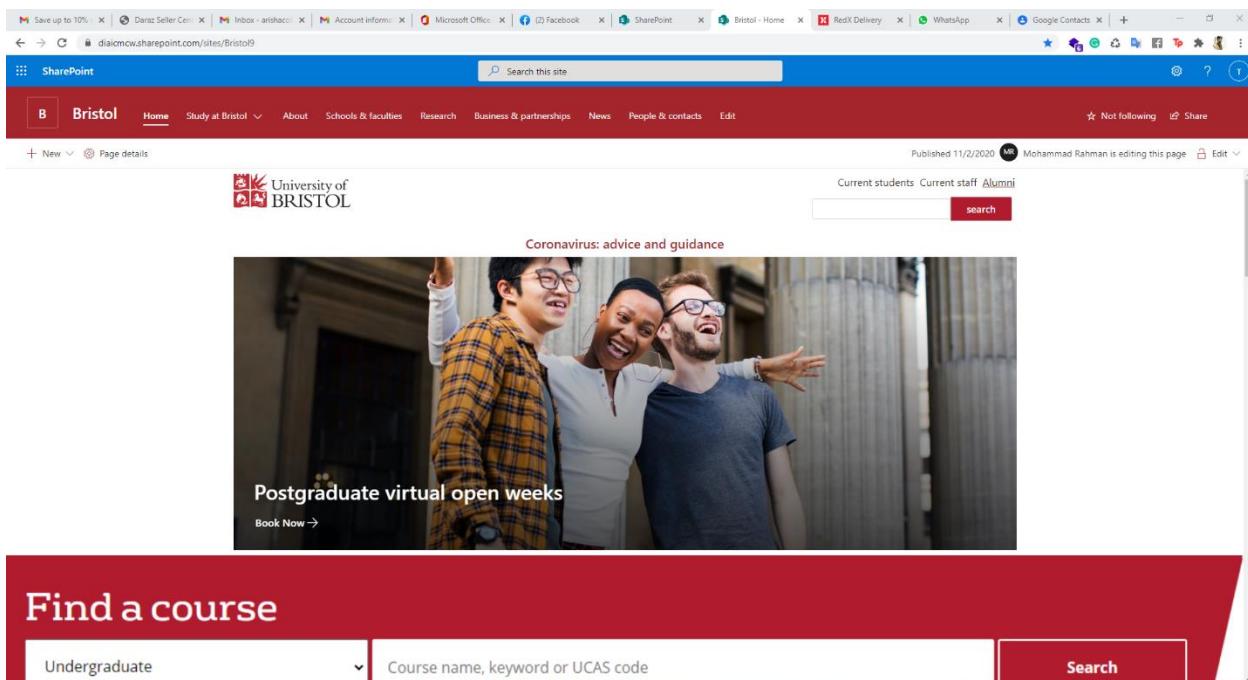


Figure 20 site opening with Google chrome

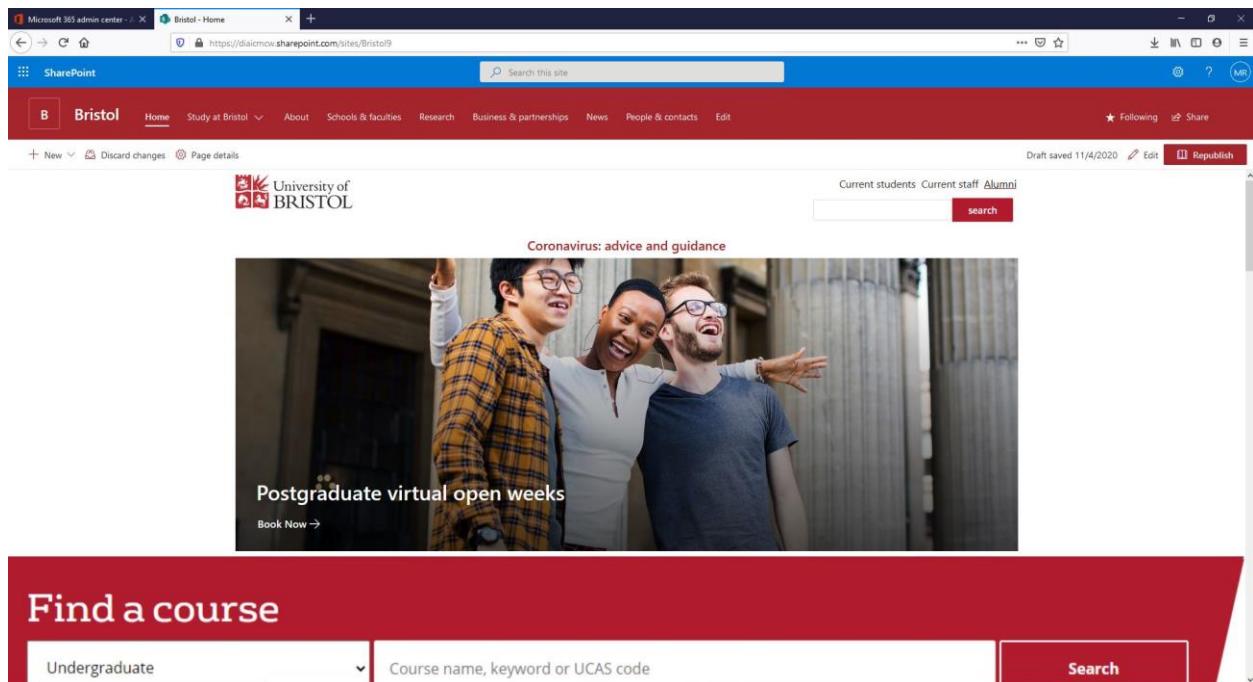


Figure 21 successfully logged in Website in Mozilla Firefox

2.6 Responsive Testing:

The Responsive plan test implies testing the site or URL from various gadgets. Essentially, it is beyond the realm of imagination to expect to test the responsive site totally in light of the fact that to do so we have to set up different frameworks for different screen sizes. (Responsive Testing, 2020)

Id	Title	Pre-condition	Test Step	Actual Result		Expected
1	Responsive Design (website view)	Using Laptop	open your site any browser in your laptop or PC	Showing navigation bar and all view properly	Showing Result Correctly	
2	Responsive View (Mobile Phone and Tab)	Using any Smartphone and Tab	Open Website in your Smartphone or Tablet.	The website properly open in any smartphone and correctly. Tablet browser.	Result showing	

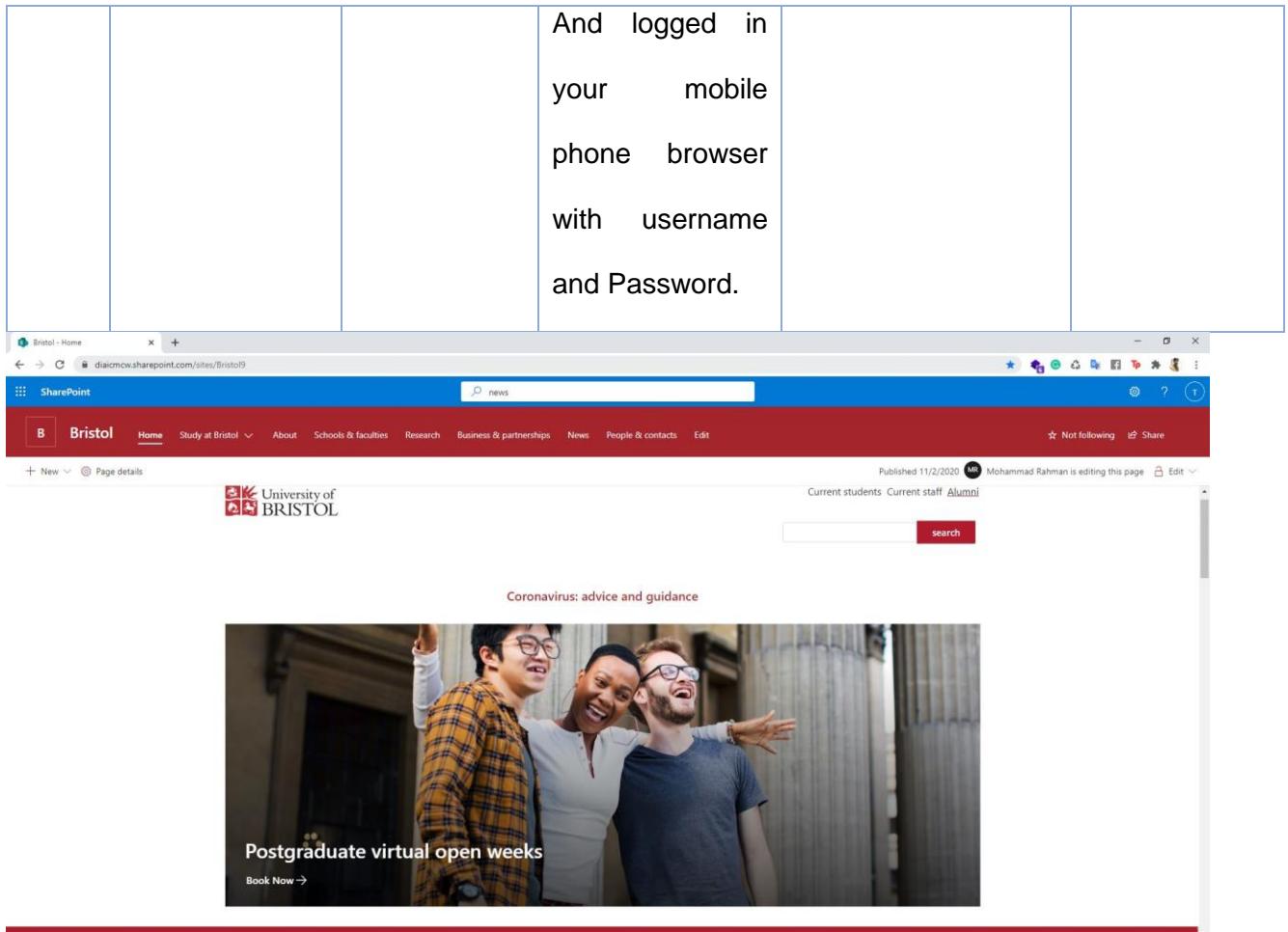


Figure 22 showing Computer View

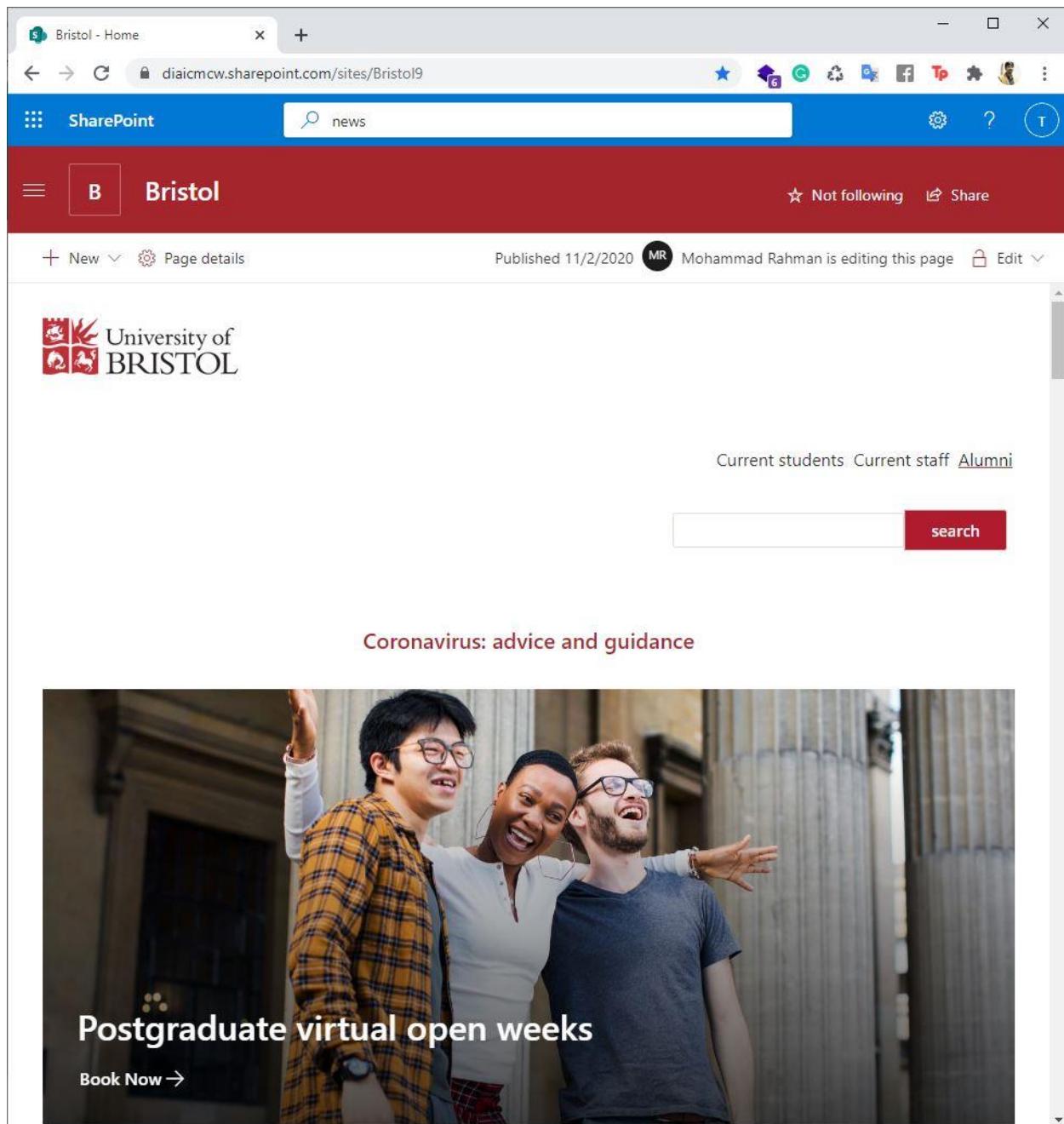


Figure 23 Showing Tablet View in website



Figure 25 Smartphone View

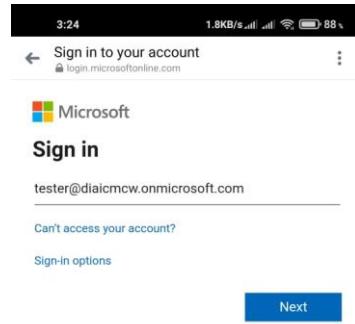


Figure 26 Sign in Required

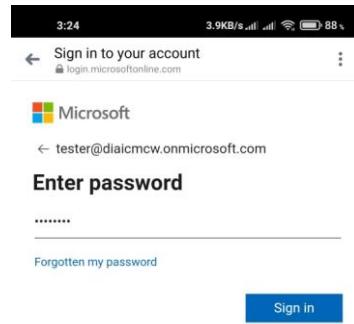


Figure 24 logged in with password

2.7 Security Testing:

Id	Title	Pre-condition	Test Step	Actual Result	Expected
1	Security Test	Must using Security Testing tool (SQL Injection)	Open Havij Testing tool and put in URL. Press the Analysis	All data has been secure. And there is no error.	Test has been successfully worked
2	Form Database	Must Export the SharePoint database	And open spreadsheet format	All data store on the spreadsheet.	Expected Result.

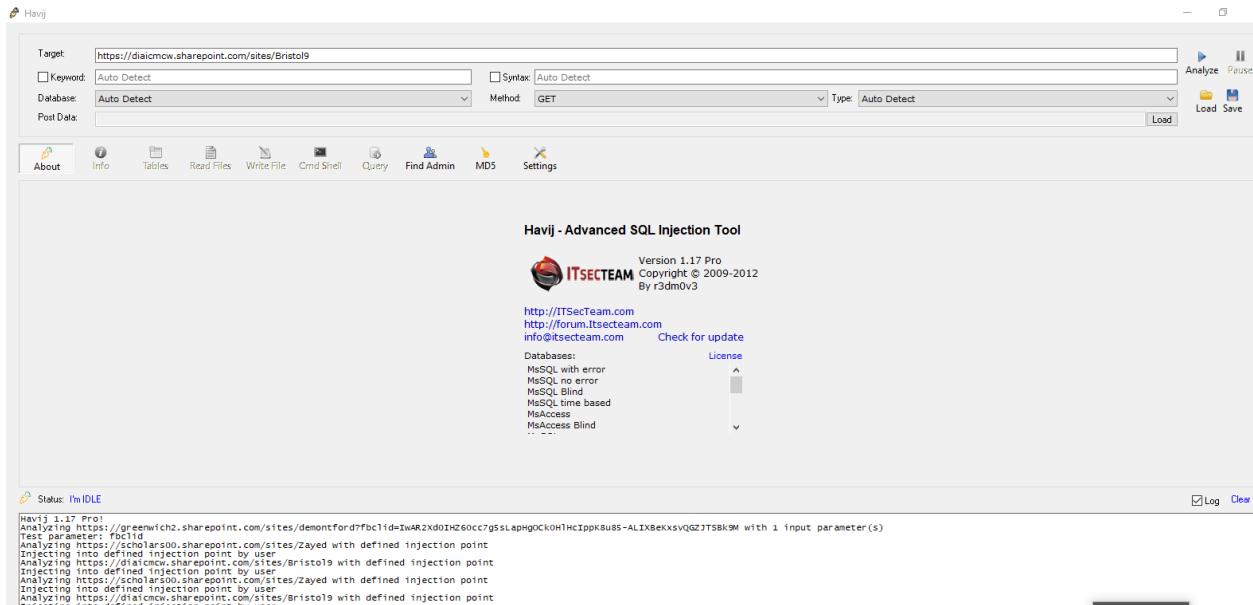


Figure 27 showing SQL injection Tool using Havij Security Tool

Forms

Feedback - Saved

Preview Theme Share

Questions Responses \$

Feedback

5 Responses 01:20 Average time to complete Active Status

[View results](#) [Open in Excel](#)

1. Your full name: (required)
[More Details](#)

6 Responses

Latest Responses
"Tester"
"UAD ALAM"
"Mohammad Sameur Rahman"

2. Email address: (required)
[More Details](#)

6 Responses

Latest Responses
"Tester@daffodil.ac"
"1000274@daffodil.ac"
"1000350@daffodil.ac"

3. Message: (required)
[More Details](#)

6 Responses

Latest Responses
"Hello world!!!"
"I love this ICM Subject *

Figure 28 Showing SharePoint Form Database

ID	Start time	Completion time	Email	Name	Your full name: (req)	Email address: (required)	Message: (required)
1	10/29/20 20:29:27	10/29/20 20:30:10	1000350@diaicmw.onmicrosoft.com	Mohammad Rahman	sameur	sameurxd@lanahost.com	test
2	10/29/20 21:27:56	10/29/20 21:28:40	1000350@diaicmw.onmicrosoft.com	Mohammad Rahman	Bulbul	1000855@daffodil.ac	What's up?
3	11/2/20 21:54:08	11/2/20 21:54:35	master@diaicmw.onmicrosoft.com	Scrum Master	Momtaz	momtazmomoo@gmail.com	hi
4	11/2/20 23:55:08	11/2/20 23:59:21	1000350@diaicmw.onmicrosoft.com	Mohammad Rahman	Mohammad Sameur R	1000350@daffodil.ac	Information and Content Management
5	11/3/20 15:41:01	11/3/20 15:41:31	tester@diaicmw.onmicrosoft.com	Liad Alam	LIAD ALAM	1000274@daffodil.ac	I love this ICM Subject

Figure 29 showing all form data

Conclusion:

It has been a great pleasure of mine to contribute to this coursework as a tester. This meant I had to get an early test planning process to ensure whenever my developer hands me solutions, I get to testing procedure immediately. I came to know a lot of regulations regarding test cases and scenarios and what sort of values are acceptable in each case for a functionality to be passed as a quality solution. This led me to debugging a lot of codes and get enough errors to handle. Whenever I found integrational problems, I notified my developer and he and I came to great solutions. The whole journey taught me well in terms of how a deployable solution needs to be tested. I have learnt a tremendous amount from this experience.

Bibliography

- Responsive Testing.* (2020, Nov 2). Retrieved from Software Testing Help:
<https://www.softwaretestinghelp.com/responsive-web-design-testing-guide/#:~:text=The%20Responsive%20design%20test%20means,systems%20for%20various%20screen%20sizes>.
- Software Testing Fundamentals.* (2020, Nov 1). Retrieved from Functional Testing:
<https://softwaretestingfundamentals.com/functional-testing/>
- Test Design.* (2020, Nov 2). Retrieved from Tryqa: <http://tryqa.com/what-is-test-design-when-to-create-it/>
- Test Log.* (2020, Nov 5). Retrieved from ProfessionalQA: <https://professionalqa.com/test-log>
- Test Plan.* (2020, Nov 4). Retrieved from Software Testing Fundamentals:
<https://softwaretestingfundamentals.com/test-plan/#:~:text=A%20TEST%20PLAN%20is%20a,schedule%20of%20intended%20test%20activities>
- Tutorials Point.* (2020, Nov 1). Retrieved from Unit Testing:
https://www.tutorialspoint.com/software_testing_dictionary/unit_testing.htm
- Usability Testing.* (2020, Nov 1). Retrieved from Experience UX:
<https://www.experienceux.co.uk/faqs/what-is-usability-testing/#:~:text=Usability%20testing%20is%20a%20way,encounter%20problems%20and%20experience%20confusion>
- What is Integration Testing.* (2020, Nov 2). Retrieved from SoftwareTestinghelp:
<https://www.softwaretestinghelp.com/what-is-integration-testing/>