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PupilRadio

Building IT Systems Assignment 2



Table of Contents

Project Background	4
Topic	4
People	4
Nallur Gurunathan Rudhrakumar	4
Daniel Popovic	4
Joshua Busano	4
Dylan Fernando	5
Aims and Goals	5
Aim	5
Goals	5
Scope	5
Project Progress	5
Description	5
Scope	6
Outcomes to date	6
Progress	6
Timetable	6
Testing	8
Tools and Technologies	8
Challenges and Learning	8
How challenging has it been so far?	8
What have you found easy?	8
What have you found difficult?	9
Was this expected?	9
What were you expecting the challenges to be?	9
Have these turned out as expected?	9
What obstacles or roadblocks have you faced?	9
What have you done to address these?	9
Have these been overcome?	9
What have you learned?	9

Have you developed any new skills or new experiences?	9
Has the project plan changed?	9
Would you make any changes to your plans now?	10
Have things turned out as expected?	10
What would you differently if you had your time over again?	10
Has your timetable been realistic?	10
What would you change in your timetable, knowing what you do now?	10
How likely are you to keep to your timetable for the rest of the project?	10
Have tools and technologies worked out as expected?	10
Have any of the risks you identified occurred?	10
Have there been any unanticipated events that have affected your progress?	10
Project Processes	11
What have you learned about group projects?	11
What has worked well in your group?	11
What hasn't worked well?	11
What are the group's processes for communication?	11
How effective have these been?	11
Have there been any changes in these since the start of the semester?	11
From your experience in this project, what is the most important aspect of organizing nature?	•
Is there anything that you would do differently if you were to start again?	11
What advice would you give to a group about to embark on a similar project?	11
Workload and Roles	12
Rudhrakumar Nallur Gurunathan	12
Joshua Busano	13
Daniel Popovic	13
Dylan Fernando	14
Marketing Pitch	14
No more antennas!	14

Project Background

Topic

Everyone loves to listen to music and we thought an online radio would be a great idea to broadcasts popular songs especially without any commercial advertisements. This online radio website will have pre-loaded popular songs played randomly and also provide an option for the user to request their favorite songs from the available list. As the project team has some prior experience in developing websites, we thought of enhancing our web technology skills by doing this project.

People

One of our team members Kevin Dao has been dropped off from this course. His roles involved creating the look of website by designing the banners, logos, photographs and layout of website. We have to reallocate the tasks for the other members.

Nallur Gurunathan Rudhrakumar

Role & Skill	As part of Diploma course, developed Website using PHP, HTML with MySQL. Will be playing multiple roles such as Project Manager – Looking after the project schedule & progress Business Analyst - Identifying the Online Radio features			
	Designer/Developer - Designing the Website and Database			
	Support Analyst - Hosting the Website			
Student No	s3544497			
Trello ID	@rudhrakumar			
Email	s3544497@student.rmit.edu.au			

Daniel Popovic

	-
Role & Skill	Responsible for the website look and feel. Have Learned HTML and PHP during
	his past studies.
	Will be creating the template and writing code for the live streaming
	functionality as well as helping with user requests code.
Student No	s3423072
Trello ID	@danielpopovic91
Email	s3423072@student.rmit.edu.au

Joshua Busano

Role & Skill	Has some experience working with HTML, PHP and Java due to past studies. Involves in designing of website and testing functionality work together with
	Kevin in making logo and banner designs for the website
Student No	s3489341
Trello ID	@JoshuaBusano
Email	s3489341@student.rmit.edu.au

Dylan Fernando

Role & Skill	Researcher - Music/Radio Streaming. Has experience with Web Developing, also
	has created his own website for his company www.dhpublishing.com.au
Student No	S3430485
Trello ID	@dylanfernando
Email	s3430485@student.rmit.edu.au

Aims and Goals

Aim

• To build an online Radio station to stream nonstop music.

Goals

- Learn to build a website using Dreamweaver CS 5.5
- Learn to use SourceTree, an online tool to save documents and manage version control.
- Host the website on a server

Scope

- Royalty free songs collected by members are stored in the server.
- Songs will be played randomly using Icecast server which will be controlled by script in the website.
- Users will be able to request a song to play by clicking request from the website.
- Request page will provide information to the user the all available songs stored in the database to select one option.
- The request activity will be processed by adding the requested song to the playlist created.

Project Progress

(Covered by Daniel)

Description

The group was created in the Friday tutorial class of week 3. Our initial idea for the topic was to create a website that would detect if a user was accessing it from PC or gaming consoles such as Xbox One and PS4. It would then allow the user download mods for their installed games. After researching this topic we decided, as a group, that it would be too difficult to create and test since we didn't find much information on the topic and we would all need access to the required gaming consoles. We also scheduled weekly group meetings during this week.

In week 4 we had decided to create a live streaming radio website that allowed users to make song requests .It was decided that we would be using copyright free music. The draft for assignment one was started and we also had another member join our group.

BITS Project

In week 5 we researched tools and technologies and copyright laws and familiarized ourselves with them. We also started creating the website template, and the database to store song information was created. We also decided to add a function to the website that allowed users to listen to specific genres of music rather than having one randomized radio stream. Assignment one was completed and submitted during this week.

During week 6 we had all members create a Github account and install SourceTree. It was decided that we would store our project files on Github and link SourceTree to it to make file management and distribution easier. The website template was partially completed but was missing a background and logo since they were not completed yet. One of our members was removed from the group because he dropped the course.

In week 7 the logo and background were completed and a more simplified website template was created. Coding for the website was also started and we have a media player on the homepage, however, we have only managed to make it play songs from a general playlist and not a randomized one. The music is also not being live streamed yet, it plays from the start of the playlist when the page is loaded.

Scope

We have experienced some scope creep as the function to allow user to listen to specific genres of music was not part of the original plan.

Outcomes to date

- A completed website template that shows the user interface.
- A working media player.

Progress

Timetable

Week	Resource	Task	Milestones
5	Everyone	All group members get to know with tools and technologies used in this project.	Everyone in the group should have an idea of how to use the important tools needed for the project such as Dreamweaver, SourceTree etc.
Rudhra & Daniel Dylan & Josh Josh	Design the website template	A suitable design template for the website should be finalized and chosen as the main page of the site.	
	1	Collecting Royalty free songs	About 10-15 gigs worth of copyright free songs have been selected.
	Josh	Working on Logo and background images	Multiple drafts of logos are done and can be chosen by the team, as the final product for the website.
7	Daniel	Start to build the website	A first draft of how the website will look

BITS Project

	Dylan		like as the finished product, changes can	
			be made by the team if necessary.	
	Rudhra &	Create database for songs	A database that will be able to hold at	
	Josh	or care autanous re. coBe	least 10-15 gigs worth of songs.	
	Rudhra &	Write coding for the website	The starting of coding for the website	
	Daniel	Time county for the website	will commence.	
8		Collect all the required songs	Have finalized and chosen all songs and	
	Dylan &	and searching for domain	to make sure there are no repeats of a	
	Josh	name	song, we also should have some domain	
		Hame	names which we can use for our website.	
			We should have a particular set of codes	
			which is able to link to the hosting	
	Rudhra &	Write coding for the website	website we've chosen, if there are any	
	Daniel	and link it hosting service	errors change to the code maybe	
			necessary or a change of hosting	
9			services.	
	Dylan & Josh	Search for webhosting service	The team would have several	
			webhosting services to pick from, along	
			with research of how much for the	
	10311	and populate songs	service and how many gigs of space	
			given in the database.	
	Dylan &	Testing the website	Test the draft of a full working website,	
	Josh		we record any errors and bugs within the	
10	JOSH	functionality and report	website and write it up in a report.	
	Rudhra & Daniel	, , , , , , , , , , , , , , , , , , , ,	The full working website should be fixed	
			if there are any errors or bugs that were	
			stated in the report.	
			The final and full functioning website will	
11	Everyone	User testing and launch website	be launched; It should do everything we	
11			had stated e.g. Songs can be heard	
			playing.	
12	Everyone	Final report draft	All the management describes a second	
13	Everyone	Final report	All the necessary documentation work	
14	Everyone	Final report	will be completed and submitted.	

The completion of the website template was delayed because the logo and background were not completed on time and as a result the completion of the template was delayed by a week. Depending on how long it takes to get the coding for the website to work we had to increase the time allocated to coding. This would mean we would have less time on the testing stage. If we can get the coding to work in a reasonable amount of time we should still be able to complete the project on time.

Testing

Project team has to come up with set of test cases to test the functionalities of the Pupil Radio Website. We will be testing the website on google chrome, Internet Explorer IE11, Firefox browsers. Two members from the project team will execute the test cases and record the bugs identified whilst others will fix the bugs. When all the test cases are executed and bugs are fixed, it will mark the website tested and working as expected.

User testing will be conducted at the end of project by inviting other group team members to test the website functionalities.

Tools and Technologies

- The website will be built using PHP, HTML5 and CSS3.
- PHP programming will be used for developing user interaction with the website.
- Dreamweaver CS5/CS5.5 will be used to design the web pages.
- Uniserver Version 8.9.2 will be used during the development process of the website.
- Website will be tested out on various browsers like Google Chrome, IE 10, and Firefox.
- Google drive will be used to keep all the completed work of this project.
- Github and SourceTree will be used during the build process to keep the codes updated and error free.
- Icecast server to stream music online.
- Web Hosting to run the website in an externally hosted server.
- Trello to record workout done by all members.

Challenges and Learning

(Covered By Joshua)

How challenging has it been so far?

So far it has been challenging, what has made doing this project challenging is

- Some members not showing up for team meetings
- · Team members not doing their part of work
- Team members not having equal amounts of work
- Using Dreamweaver
- Using Github and SourceTree

What have you found easy?

Some members in the group are very experience in using HTML and PHP; this has made progression with creating a website easy.

We have also found creating the logo for the website easy as, team members are familiar with using Photoshop and has some knowledge in website design.

What have you found difficult?

Some members have found using Dreamweaver, Github and SourceTree difficult to use. This is due to having been introduced to new software which is necessary for the project to function. Github and SourceTree has been the most confusing one to use, as it requires all team members to upload all changes and work done to the website or any assessments reports.

Was this expected?

Ideally it was expected, as learning new things can always be challenging especially learning new programming software as there are a lot of codes to remember and learn.

What were you expecting the challenges to be?

- Creating a suitable logo for the website
- Creating a banner/header
- Creating a full functioning website
- Creating a full functioning media player within the website

Have these turned out as expected?

What	obstacles or roadblocks have you faced?	What	have you done to address these?
1)	Team members not coming to team meetings	1)	Let the team leader know you are not
2)	Not being able to find a website which		able to make it
	provides us with royalty free songs	2)	Search properly online

Have these been overcome?

These roadblocks have yet to be overcome, as team members are still yet to come to team meetings and we are still having trouble in finding a reliable resource for royalty free songs.

What have you learned?

Some team members have now learnt how properly use Github and SourceTree. We have also learned how to use Photoshop and Dreamweaver together to create a front page of the website which is functioning.

Have you developed any new skills or new experiences?

Team members have developed skills in all the new software we are using to create the online radio website. This includes using Photoshop to create our front/home page of the website and then using Dreamweaver to make the page functional with tabs and links to different pages.

Has the project plan changed?

The project plan had changed from the start; we had planned to create a modding website where users can download their mods straight from the site to their systems. We however changed it to an online radio website. Since we have changed our topic choice, we had also changed all our aims and goals for the project.

Would you make any changes to your plans now?

We wouldn't make any changes to the plans right now, as everything is running quite smoothly and according to the plan. However, we have allowed more time to the coding of the website and less time to the testing of the functionality of the website.

Have things turned out as expected?

The project has turned out quite well, the website currently is up and running, there is also a media player which can only play one song; we also have a logo for the website and soon to have a banner for the website.

What would you differently if you had your time over again?

I would like to have started the project earlier as we had to start around week 5, due to this we had to start late and had to catch up with all the missed out work for each of the weeks.

Has your timetable been realistic?

Our timetable so far has been quite realistic, as we have set realistic tasks to be done. For example we have a task which is to create a database for the website which can hold songs. Also another example is to look for royalty free songs to put in the database.

What would you change in your timetable, knowing what you do now?

We wouldn't likely change the timetable right now. This is due to the project running smoothly and according to the timetable plans.

How likely are you to keep to your timetable for the rest of the project?

We are more likely to keep to the timetable set by the team for the rest of project, as everything has gone well while following the current timetable.

Have tools and technologies worked out as expected?

All the current tools we are using have worked out as we expected. Especially Github and SourceTree have been working really well for us, as it the foundation for our website.

Have any of the risks you identified occurred?

We have the risk of lack of skills with the technologies and tools, finding songs that are copyright free and team members communicating with the team leader and coming to the team meetings,

Have there been any unanticipated events that have affected your progress?

There has been one instance of a team member leaving and leaving all his unfinished for us to do, we had another instance where we couldn't find any songs which are free and we didn't want to use just any song as we could run the risk of paying fines for using a song without permission.

Project Processes

(Covered By Rudhra)

What have you learned about group projects?

Being a project manager is a difficult but interesting role. This role in the group project helps to develop problem solving skills. Group project also helps to learn new technologies and tool from other members.

What has worked well in your group?

All the team members are striving to achieve the allocated task. We have found some backlogs during this iteration and we came up with updated task list in the following week to solve the work backlogs.

What hasn't worked well?

Team meeting as scheduled has not worked well. We planned three face to face meeting in a week including the tutorial hours. But we did not provide any fallback approach if any of our members didn't make the team meetings.

What are the group's processes for communication?

We have a clear schedule about the team meetings and communication methods. It's every team member responsibility to attend the meeting and also answering any request from the other team member within a day. Weekly tasks will be assigned on Trello board for all team members and it is responsibility of members to follow and complete the task with in the time specified. The tasks are assigned in the tutorial class.

How effective have these been?

It is not very effective due to member's absence quite often.

Have there been any changes in these since the start of the semester?

We have modified the one of the scheduled meeting to online chat instead of face to face meeting.

From your experience in this project, what is the most important aspect of organizing a project of this nature?

It is important to understand the projects basics then make a plan how to implement it. Draw a clear sketch of tools and technologies required skill required including the time scheduling. Discuss with the team members how to achieve the target before the start of project. Activity meetings and good communication in the group is an important aspect.

Is there anything that you would do differently if you were to start again?

Getting to know the abilities of team members and setting goals accordingly will result a better outcome of the project.

What advice would you give to a group about to embark on a similar project?

I would suggest every member's contribution to a project is very important as well as communication between the group members.

Workload and Roles

(Covered by everyone)

Rudhrakumar Nallur Gurunathan

Date	Week	Description	Hours
27-Mar-15	4	Team formed and project decided	2.0
29-Mar-15	4	work on Assignment 1	3.0
30-Mar-15	4	Team meeting and assignment discussion and modification	1.0
31-Mar-15	4	Involved in team meeting with Josh at RMIT, finalize and submit A1 document, communicate with members who didn't show up today and book consultation meeting with James.	1.0
	5	Install Dreamweaver-CS 5.5 on my laptop to work on this assignment and work on website template	3.0
	5	Research on how to use Github Create new account with Github and created a public repository	3.0
	5	Download SourceTree on my laptop and linked Github account	1.0
10-Apr-15	5	Tutorial hours	2.0
13-Apr-15	6	Commit the Project files through SourceTree Checked the other member Daniel is also able to update and edit code using SourceTree	2.5
	6	Download UniserverZ and linked it to the project created database in it to store music playlist	1.5
13-Apr-15	6	Team Meeting Discussed the weeks plan with Daniel	1.5
14-Apr-15	6	Expecting members for the scheduled meeting at RMIT Campus on 14/4/15 discussion online with Dylan and Daniel	0.5
16-Apr-15	6	Managing Trello and look over the digitalocean.com website and sign up	0.5
17-Apr-15	6	Work on peer Assessment, discuss with tutor about the team status and issues, hosting server setup issues, and following week plan	2.0
20-Apr-15	7	Peer Assessment done on "The Rocket", Team meeting on 20/4 with other members, Updated Trello,	1.0
23-Apr-15	7	Modify the web page look by changing various css code from website template.	3.0
23-Apr-15	7	Change background image, added media player to home page	2.0
24-Apr-15	7	Discussed about assignment 2 and allocated to each one to some part of it. Discussed about the road block (can't get songs) with tutor and get some solution from Gin. Allocated task for next week. Tested the website built so far	2.0
26-Apr-15	8	Assignment 2 document preparation	2.0
26-Apr-15	8	Team meeting with Daniel, Work on Assignment 2 and decided to research on Icecast web server to stream music	1.0
29-Apr-15	8	research on Icecast web server to stream music	2.5
29-Apr-15	8	Used byethost hosting services and learned how to host website	2.5
1-May-15	8	Tutorial Hours	2.0
		Total Hours For Rudhrakumar Nallur Gurunathan	42.5

Joshua Busano

Date	Week	Task	Hours
27-Mar-15	3	Formed Groups and decided on a team project	2.0
22-Mar-15	3	Searched for any game mods to put onto website includes any platform e.g. Xbox or PC	3.0
23-Mar-15	3	Searched modding websites for examples	1.0
24-Mar-15	3	Searched Background information on Xbox, PlayStation and Nintendo	1.0
27-Mar-15	4	Team had decided to change the project to an Online Radio Website (Tutorial). Started on Assessment One	2.0
31-Mar-15	5	Looked at Assessment one draft, doing a cross check with the assessment criteria (Meeting)	1.0
4-Apr-15	6	Work on a website Logo	1.0
17-Apr-15	6	Tutorial, Team meeting at tutorial	2.0
24-Apr-15	7	Assigned by team leader to do "Challenged and Learning" of Assessment Two, Create a banner for website	2.0
25-Apr-15	7	Finding copyright/royalty free songs	1.0
26-Apr-15	7	Started a design for website banner (draft)	2.0
27-Apr-15	8	Started work on Assessment 2 "Challenges and Learning"	1.0
28-Apr-15	8	Started working on banner on Photoshop	1.0
30-Apr-15	8	Finished Banner (Two Banners to choose from)	2.0
		Total Hours	22.0

Daniel Popovic

Date	Week	Task	Hours
20-Mar-15	3	Joined Group/Decided on project/Scheduled meeting times (Tutorial)	2.0
21-Mar-15	3	Research on game mods	3.0
23-Mar-15	4	Discussed about changing the topic with Rudhrakumar (Meeting)	1.0
27-Mar-15	4	Decided to change the topic with whole group (Tutorial)	2.0
29-Mar-15	4	Worked on assignment 1 draft	1.0
30-Mar-15	5	Team meeting and assignment discussion and modification (Meeting)	1.0
4-Apr-15	5	Research on what technologies/tools we will need and learned to use them	5.0
10-Apr-15	5	Created Github account and linked it to SourceTree (Tutorial)	2.0
13-Apr-15	6	Discussed week plan (Meeting)	1.5
14-Apr-15	6	Created the website template/css	5.0
14-Apr-15	6	Discussed project with Rudhrakumar	0.5
17-Apr-15	6	Decided who is assessing which group/signed up for digital ocean/server issues	2.0
19-Apr-15	6	Completed peer assessment on "Sassy Pants" group	2.5
20-Apr-15	7	Discussed weeks plan (Meeting)	1.0
21-Apr-15	7	Research on live streaming methods and coding	2.5
24-Apr-15	7	Discussed my findings on possible solution for streaming/Assignment 2 started	2.0
26-Apr-15	7	Working on assignment 2	3.0
		Total Hours for Daniel Popovic	37.0

BITS Project

Dylan Fernando

Date	Week	Task	Hours
		Dylan does not provide any details	
Total Hours for Dylan Fernando			

Marketing Pitch

(Covered by Rudhra)

No more antennas!

The broadcasting industry has experienced dramatic changes in the past decade. Finally, the digital technology is here and radio stations can stream their broadcast on the Internet. Your listeners are worldwide, no longer bound by the limitations of the antenna.

Internet radio station is reaching people 24 hours a day around the world while they work, shop, chat, email or surf online. We have developed an online radio station that delivers an audio stream of outstanding quality regardless of the listener's connection speed. We assure this product will be very entertaining.

PupilRadio is currently provides online streaming of music 24/7. The current server capacity will be able to gather listener's up to 100. Increasing the server's capacity will lead to more listeners. PupilRadio will also feature the functionality of online song request by the user.

So far PupilRadio has been created template of webpage with navigation menu with background image. Also it has a media player which plays music when the page loads. We are currently building song requesting functionality which is expected to complete in two weeks' time.