

19COB290 Team Projects

Part 3

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New Software Platform

There has been a change in Make-It-All's management – with the expansion of the company a new Operations Manager, Mr. Newman, has been appointed with responsibilities that will include overseeing the helpdesk software development from the customer point of view. Mr. Newman's experience is mostly with Content Management Systems and he has appointed a number of Content Management System technicians to operate and maintain the company systems. In order to simplify Make-It-All's software support and maintenance, he has agreed with your company that all software supplied to Make-It-All will be built using a Content Management System. All software is to be built using either WordPress, Joomla or Drupal. (You may well disagree with this policy but it is not your decision as your management has already signed a contract for the software re-write.) The essential functionality required of your system is similar to the last deliverable.

New Customer Spokesperson

Alice has left Make-It-All. She was headhunted to head up a newly expanded team of people to run the Complaints Desk of the Foreign Office, so you will no longer be able to ask her questions. Instead, a new forum will be available for you to ask questions of Mr. Newman, the Operations Manager.

New Customer Attitude

With the departure of the existing expert operator, Alice, Mr. Newman has let it be known that he has a flexible approach to the helpdesk system and is happy to consider changes to the way it is run if you can make a case to do so. The requirements that Mr. Newman wants you to prioritise is the user's need to get a quick answer to a problem if it is a common or known problem with a known solution or, if that is unavailable, to have a specialist assigned to solve the problem who has the right expertise and availability. The requirement to use the helpdesk to identify trends in equipment problems and user's training needs is a low priority and could be delayed to a later development. It will be a bonus if this is achieved in this deliverable.

Change in your own software company's management

Make-It-All are not the only company to experience change. Your own company has been re-organised to reflect the customer's changing requirements. You will therefore have a new team, new management supervision and new management reporting procedures.

New Teams

All other members of your team have been re-assigned to work on other projects and you are the only team member left on the Make-It-All helpdesk development. **You have therefore been assigned to a new team which will be expected to develop a suitable system using a Content Management System.** Details of your new teams are on a separate document.

New Managers

There is also a new style of management being adopted in your re-organised company. You have new managers who are much more "hands on" and will meet you on a regular basis to monitor your progress. **Your managers would also like to encourage adoption of "agile software development" within the company.**

You have two “managers” who will meet you every Tuesday afternoon Thursday morning for a 15 (approx.) minute meeting. They will ask you about what you have done each week and what you intend to do next week and they may make comments on whether they think your progress is sufficient or not. Note that their job is NOT to micro-manage and tell you every little detail about what you should do next, it is still up to you to organise yourselves and your work, though they may offer guidance if and when they think it is necessary. Details on who your managers are and the times you will meet them are given in a separate document. (These “managers” will, in fact, be Masters students taking a module on managing a project team. They, in turn, will be reporting to the staff running the Team Projects module. Although they will not be marking your work directly, they will be preparing a report on each team’s progress that they must deliver as part of their coursework. We can then take their observations into account when allocating marks to you. I.e., these meetings with your managers need to be taken seriously as they will affect your mark.)

New Reporting Procedure

A further change in the management style is that the new senior management no longer require a Project Management Website. Instead, you are required to prepare a weekly report on your plans and progress. The format for these reports is not specified – however, the purpose is to enable the managers to know how well the team understands the problem, how well they are organised, whether their plans are adequate, whether they are on track and what problems, if any, the team has encountered. I.e., you must make it as easy as possible for them to know the state of progress. These reports will be read by your two team managers and also by the Team Projects staff. Therefore, you should include weekly action plan and progress achieved in addition to any additional content requested by your team managers. These reports form one of the assessed deliverables.

New Forums

Note that a new set of three forums has been created to enable you to communicate with Make-It-All’s Mr. Newman, the helpdesk specialists, Bert and Clara and the helpdesk users, Dilip and Emma. New versions of the two forums will also be created to communicate with your own company manager, Mr. Bossman, and the technical advisers, Database Dave, Terry Tech. This is to enable communications to be kept confidential to your new group. If you use the forums for the earlier deliverables then your old team members will all see your message, but your new team members won’t!

In addition, a new forum has been created on the Team Projects Learn page called “TeamXX forum for communicating with managers”. This is to enable you to communicate with each other and with your project managers (not the senior management, this is your assigned manager). Anything you post on that forum will only be visible to the members of your team, your managers and the staff running this module. Members of other teams will not be able to see your messages. You can use this forum for discussions between yourselves and for messages/questions for your managers. Please label any message for your managers with “Message for the management: <subject>” in the subject line. Note, you should not use this forum to communicate with the customer staff, your own senior management or technical advisers, please use the dedicated forums for this purpose.

Once a week, by the end of each Monday, you should put a post on your own Team’s forum with your weekly report either embedded in the message or as an uploaded attachment to the message. Please make the subject line for this message “Weekly report on <date>”. These reports are required from week 5 to week 10 (though you are not required to give weekly reports during the Easter vacation!).

Learning to Use a Content Management System

You have been given an introductory lecture how to use a Content Management System, and you now have a task to do using this technology. This problem is one that frequently occurs in industry, where you will often find you are faced with new computer languages, new operating systems, new development tools, or new ways of working without adequate training. There may be a training course available, but often you may not be given permission to attend or it won’t be starting until your project is well under way. In these circumstances you must use your initiative. Find whatever you can about the new system from books, the Internet, from colleagues or from existing systems using the technology (hint: try looking up each system on Google and Wikipedia).

In this project you will find that not all of the staff running this module have any depth of knowledge of Content Management Systems. However, it is well known that the three systems have the following properties:

WordPress has the reputation of being by far the easiest to learn and use, providing you can find a template that fits your problem well without too much modification. It is not as versatile as Joomla and Drupal, so it can be harder to get it to do something very different to anything anyone has produced before.

Drupal is the opposite of WordPress. It is very versatile and can be modified to do just about anything. However, it has a steeper learning curve, and it may be more difficult to use if you are inexperienced in using it.

Joomla sits somewhere between WordPress and Drupal. It is quite possibly the best compromise of ease-of-use verses versatility. However, Joomla is the system the technical advisors know least about, so they may not be able to give as much help on this system.

There are, literally, thousands of plug-ins for these three systems. However, although each of the above Content Management Systems is free to use, not all the plug-ins are available without a charge. Make-It-All has made it clear they have a strong preference that there should be no additional fee to pay for the software or the plug-ins so, therefore, you are advised not to pay for any such plug in.

Assistance

An IBM manager once said he liked Loughborough placement students because “they don’t have to be spoon-fed like many others”. This deliverable is part of your training to cope without “spoon-feeding”. Try to deal with the issues that arise yourselves. However, if you really need help, a “technical adviser” (this does not mean s/he knows everything about it, just that they know more than the other staff!) will be available in the lab sessions to answer questions. The technical adviser: Dr Simon Andrews.

The Implementation System

You will continue to use Google Cloud Platform (GCP). You’re strongly advised to backup your work for part 2 as soon as possible.

Reports, Demonstration and Deadlines

The **weekly progress reports** must be uploaded in the body of a post or as an attachment to a post on the online forum on Learn by the end of each **Monday from weeks 5 to 10** inclusive.

During week 11 of semester 2 each group will be expected to give a demonstration (~25 minutes, including Q&A). This demonstration must ‘sell’ your ‘final solution’ to the Make-It-All company representatives.

Your final helpdesk web site must be made available by **2pm on Monday of week 11** on a GCP virtual machine with the **URL**, plus any **usernames** and **passwords uploaded on the Learn**.

In addition, the following deliverables are required:

- (A) A report which describes how your team has applied agile software development followed by a test plan for your system with evidence that you have followed your test plan.
- (B) A report (max. 6 pages) which describes your “Content Management System development journey” for Part 3. Describe how you approached the problem, the reasoning behind the various design decisions you made, the issues that arose and how you overcame them, and the compromises you chose or were forced to make. You should also reflect on what you have achieved in the project – identifying what you think is particularly good about what you have done, what you think could be improved (and how it might be done), and what you have learned from undertaking the project.
- (C) A report (max. 3 pages) which assesses the advantages and disadvantages of using a Content Management System compared with developing a system from scratch PHP/JavaScript/MySQL. Explain the circumstances under which each would be a preferable alternative.
- (D) An assessment of the contribution each member of the group made by entering scores for each member of your team for each question asked on the **Web-PA** system.

Reports A to C are group deliverables, only one deliverable is required per group. Deliverable D must be carried out by each individual member of each group.

The reports A to C must be submitted in electronic form uploaded on Learn by 2pm on Monday of week 11 in semester 2. Web-PA should be used for deliverable D – this should be completed by 2pm on Friday of week 11 in semester 2.

Assessment

The basic split of marks is:

- Helpdesk Website/Demonstration 50%
- Weekly Reports 10%
- Report A 10% (Test plan and records)

- Report B 20% (Your Content Management System development journey)
- Report C 10% (Comparison of Content Management System development vs PHP/JavaScript/MySQL)

Report € **D** will not be directly assessed as part of the group mark, but will be used to enable individual marks to be awarded. The individual marks will be based on the Web-PA scores for each member's contribution to the project, the comments by the team "managers" and observations by staff.

Plagiarism

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