TMA 02 Review of Work in Progress

1 Introduction

TMA 02 is a summary of your progress. The purpose of this TMA is to give you the opportunity to review this progress and to provide sufficient detail for your tutor to support and advise you as you continue with your project work.

By the time you get to TMA 02 you should have made progress clarifying your project direction and started your project work. You should have produced detailed logs and notes of your ideas, reviews of source materials, and initial development of your solutions.

By now you should have completed a detailed analysis of the problem and should be able to demonstrate in your TMA report that you have a good understanding of it, and in particular the ICT aspects of the problem. You should be able to explain the key aspects of your solution and its overall design, and support your choices by reference to your research of the literature. You should be able to produce a detailed guide that explains how all the key ICT aspects of your solution will fit together.

The marking of this TMA will assume that you have continued working at the required study rate of about 10 hours per week since you submitted TMA 01. You should be spending about 75% of your time on your project work, and about 25% of your time writing TMA 02.

Once you have submitted this TMA you should read the TMA 03 document, so you have this in mind as you continue with your project. Continue to work on your project while you are waiting for the feedback on this TMA from your tutor, or it will be more difficult to keep to your project plan. Also, stay in touch with your tutor on a regular basis between TMA 02 and 03, letting him or her know what progress you have made and asking questions as necessary.

Submitting your TMA

This module uses the electronic TMA (eTMA) system for submission of TMAs. To submit your TMA, please go to your StudentHome page and follow the link provided.

The eTMA system limits file sizes to 5 MB for this TMA.

If you foresee any difficulty with submitting your assignment on time then you should contact your tutor well in advance of the cut-off date.

For further information about policy, procedure and general submission of assignments please refer to the Assessment Handbook, which can also be accessed via your StudentHome page.

2 Project activities

When you submit TMA 02 you will be expected to have made progress on the following project activities, which are derived from the module learning outcomes.

a. Documenting progress in analysing your chosen problem and in developing a solution using appropriate technical concepts and principles.

b. Identifying the key information sources that will inform the project in the next phase.

c. Reviewing progress against your original plan, especially any practical activity undertaken.

d. Evaluating possible legal, social, ethical or professional considerations arising from the project.

e. Reflecting on your approach to project working, identifying things that you do successfully and productively, and factors relating to your working style and time management that frustrate progress.

f. Refining the goals and content of your project in the light of: feedback from your tutor; further reading; your experience of practical progress so far; and interaction with stakeholders.

g. Identifying any additional resources and/or unanticipated skills and activities you need to carry out your project, plus any associated risks and revise your plan as appropriate.

You should continue to maintain your project journal as you complete these activities, including a record of what you have done and why, what you have read, problems you have encountered and how you overcame them, and so on. This will make writing your TMA 03 and EMA much easier to do.

Before starting these activities you should study the guidance in Section 4 and the indicative marking scheme in Section 5 – the latter outlines some of the expectations of your tutor so bear these in mind as you do the work.

As you complete these activities, refer to the various documents on the TM470 website, linked from the Resource Map: Resources for TMA 02 as these are designed to assist you.

3 What to submit for TMA 02

We suggest you **organise** your TMA under three main headings:

- Preparation and planning
- Project work
- Review and reflection.

Whilst you need to include all the elements in Tables 3.1, 3.2 and 3.3, you should not see it as a rigid template for your TMA 02. Rather, identify the structure which best enables you to express your project work in a coherent narrative that is easy to follow. However, you should make sure that the elements in Tables 3.1, 3.2 and 3.3 are easily identifiable and assessable.

We think that you should be able to provide what is needed in around **4000 words, plus one or two appendices.** Please use landscape format where it improves readability for the marker – this can be a problem for some screen shots and program code listings.

The length of each section will vary according to the nature and subject of your project. Your tutor can advise on the balance. But remember that your TMA will be marked against the learning outcomes, so if you omit one of these or only treat it in a cursory manner, you will limit the marks you can be awarded. Also, L07 emphasises clarity of communication, so poorly structured and/or over-long TMAs are likely to do less well.

The relationship between the various project activities you carry out and the learning outcomes is not always straightforward but we have indicated the most important learning outcome for each. But when your tutor marks your TMA other learning outcomes may be relevant as well. For example (these are not the only examples):

- **LO7**. *Communicate information, ideas, problems and solutions clearly* is relevant to all activities.

- **LO8**. *Learn independently and reflect on what has been done, with a view to improving skills and knowledge* is relevant to your write up of most of the activities as we are expecting you to explain and justify your decisions throughout.

- **LO11. Analyse a practical problem and devise and implement a solution, building on the knowledge and skills developed throughout your earlier OU studies and experience** encompasses the whole of your work up to this point.

Your TMA will be assessed **as a whole** so you must ensure it is internally consistent. For example, the schedule for a project following an iterative lifecycle model will be different to one following a waterfall lifecycle model. Similarly your schedule should contain the tasks and subtasks you have identified.

Your work should build up between submissions, so you will need to include material from TMA 01 so that your tutor does not have to refer back to TMA 01 to check what you have done. If you are unsure about this, please check with your tutor how much of TMA 01 you should include.

You should write in a grammatically correct, professional manner, avoiding slang or colloquialisms, recognising that your tutor is broadly knowledgeable in Computing and IT, but may not be familiar with the specifics of your particular project.

Before you start work on your TMA it is **extremely** important that you study in detail both the guidance in Sections 3.1, 3.2 and 3.3 and the indicative marking scheme in Section 4 – the latter outlines some of the expectations of the marker.

As with TMA 01, much of what you write here will form the basis of your final project report (the EMA), so investment at this stage will save work later on. Check the tense of any text you carry forward in order to ensure it makes sense now the project has moved on to the next stage. Continue to adopt a style of writing that addresses a knowledgeable and specialist reader.

3.1 Preparation and planning

Table 3.1

Preparation and planning	Learning outcome
Describe any revisions you propose to the problem definition, scope and goals in the light of your experience so far.	**LO2**. Identify and refine the goals and content of your project.
Outline any additional (previously unanticipated) resources you will need and methods you are considering using.	**LO3**. Identify, list and justify the resources, skills and activities needed to carry out the project successfully. Identify and address any associated risks.
Identify the main obstacles or problems that need to be addressed in the near future. Revise your assessment of the major risks to successful completion of the project work for the project. Identify those elements of the project that may not be addressed if plans need to change.	

Title and scope

Restate your project title. If it has been changed to reflect any refinement in the aims and objectives made (including as a result of your reflection, review activities and any feedback from your tutor), then you should include a sentence or two that highlights and explains the changes made.

If your project began by addressing a relatively ill-defined problem, now is an appropriate point at which to revise the problem description so that from now on you and your tutor are both much clearer about what you are attempting to achieve. Use the same key points as for TMA 01 by stating:

- What is the problem that needs to be solved or understood?
- Why is it considered a problem?
- What will be the benefits of solving it?
- What are the key ICT aspects of this problem?
- What is your existing knowledge of this problem?
- What might the solution look like?

- What, specifically, will you deliver by way of a project output?

Resources

Consider only additional resources not anticipated in TMA 01. As before, there is no need to include reference to readily available resources such as the OU Library, a PC/laptop computer, etcetera. Rather, you are likely to include specialist equipment or software, collections of data, access to people who are stakeholders or users. For each additional resource, you should say why it is needed and indicate how you intend to ensure you can acquire it in a timely way.

Future plan

You should give an updated schedule of future activity for the project. You may use a format of your choosing for the schedule, as long as it is clear and can be inserted as text or a table in your TMA document. Your tutor will make an assessment of whether your approach is justified in relation to the nature of your project

3.2 Project work completed

Table 3.2

Project work	Learning outcome
Evidence of progress made. This is likely to consist of: 1. a critical account of sources of information you have read and evaluated in relation to the needs of your project; you should highlight the additional reading done since TMA 01 2. documented evidence relating directly to the work you have done towards the project's main outcome; highlight the main areas of progress.	**LO4.** Gather, analyse and evaluate relevant information to complete the project successfully. **LO6**. Make effective use of a variety of information sources including the internet, demonstrating awareness of the credibility of the source. **LO1**. Demonstrate and apply a systematic understanding of the fundamental technical concepts and principles relevant to your project.

Information sources

You should update the account of any reading you have done to reflect any guidance from your tutor and *highlight the additional reading* that has shaped your thinking since TMA 01. _Reviewing Literature_ will help you. By all means mention material that you have read and discounted, but do so very briefly.

Project work

At this stage you should have made some progress with your project work. Early work that was exploratory, sketchy and tentative should have been refined and polished (assuming it is still relevant), but some recent work may still be in draft form. The nature of the evidence you submit will depend very much on your chosen topic.

- For a research project you may have identified, read and briefly summarised some key academic or technical papers, eliciting and summarising some of the important relevant technical concepts and issues.

- For a development project you may have successfully elicited requirements for a piece of software and have produced an initial design. At the same time, you may have attempted writing a core piece of code that you expect to prove challenging.

- For an evaluation project you may have produced a refined version of the initial criteria that you are going to use for an evaluation or perhaps you may have designed, piloted and evaluated a questionnaire and have produced a revised version for final use.

These are only examples, but hopefully they will help you understand the kind of project work that is anticipated.

The evidence which is central to the argument of your TMA should be in the main body of the report. However, you will probably need to provide supplementary evidence of your progress in one or more appendices. Examples of supplementary evidence are a full list of the relevant information sources you have read, including full references using the correct format; detailed findings so far, a draft interview plan and schedule, full program code, the data gathered as part of evaluation, design documentation, etcetera. The purpose of these appendices is to enable your tutor to fully understand the work you have done, assess its quality, and to help your tutor provide you with support and guidance. Your tutor is not required to read the appendices in detail – only to scan them and dip into them as necessary.

If you include program code, you must omit any auto-generated code as this will be picked up by Turnitin and make it appear that you have been plagiarising.

Don't spend time over-polishing this evidence of project activity: its purpose is to allow your tutor to assess whether you are making adequate progress using relevant concepts and methods so he or she can give appropriate formative feedback.

3.3 Review and reflection

Table 3.3

Review and reflection	Learning outcome
Identify those elements of your plan that have gone well and (more importantly) those that have proved more problematic. Adjust your plan as necessary.	**LO9**. Plan and organise your project work appropriately, and keep systematic records of plans, progress and outcomes
Provide a brief account of the legal, social, ethical and professional issues raised by your project and describe any adjustments to the project made in light of them. You should consider these as if your project were to be fully implemented and/or your report presented to its target audience.	**LO10**. Identify and address the legal, social, ethical and professional issues that may arise during the development and use of computing and IT systems.
Indicate how you have responded to your tutor feedback on TMA 01. Briefly indicate to your tutor any specific issues on which you would like feedback.	*This will help your tutor to understand what you have decided to do and why, so he or she is in a better position to advise you.*
References	
Appendices	

Ways of working

The main purpose of review and reflection at this stage is to identify things that have gone well and things that have not gone well. Most importantly, you should identify ways of working that you have found efficient and effective, alongside any factors that are preventing you from making progress and which need to be either avoided or addressed.

Evaluating project management

You should review your chosen project management method or lifecycle model to ensure it is supporting you appropriately. In particular, make sure:

- it is helping you identify and manage dependencies between tasks
- the steps taken are of the right 'granularity', that is they are neither too large nor too small
- it helps you think about the scheduling of what you do in a way that helps minimise risks to a successful outcome.

Legal, social, ethical and professional issues

As you develop a better appreciation of the project and the context of its application, legal, social, ethical and professional issues (LSEPI) may occur to you, perhaps concerning adverse impacts its outcome could have on the legitimate interests of other people, or the way in which you will need to adjust your behaviour or activities in order to behave professionally. You should discuss the potential impact of any concerns and explain how you will address these. Legal, Social, Ethical and Professional issues contains further guidance on identifying such issues.

Some tips

- Start by restating the title of your project followed by a clear statement of the aims and objectives of your project.

- When we refer to risks we means risks to timely project completion; this is not the same as whether you expect to pass or not.

- Throughout, emphasise what you have learned, not only about the problem itself but about the way you work most effectively.

4 Indicative marking scheme

Please check this mark scheme carefully as it differs from that of previous TMAs.

Your tutor will use a grade-related marking scheme based on Table 4.1. You can use this table as a form of self-assessment to help ensure you are working at the appropriate level. Learning outcomes 2 and 10 have been grouped, 4, 6 and 7 have been grouped, 1 and 11 have been grouped, and 3 and 9 have been grouped which results in five learning outcomes/groups of learning outcomes which will be equal weighted when your TMA is marked.

A full statement of each learning outcome is given in the Study Guide.

Table 4.1 Indicative marking scheme

	Grade				
Learning outcome	**1**	**2**	**3**	**4**	**5**
	(17–20)	(14–16)	(11–13)	(8–10)	(0–7)
	Distinction				Fail

LO					
LO2. Identify and refine the goals and content of your project. **LO10**. Identify and address the legal, social, ethical and professional issues (LSEPIs) that may arise during the development and use of computing and IT systems.	Describes and justifies any refinements to the project aims and objectives. Sound evaluation of risks in light of experience so far. Comprehensively identifies the relevant LSEPIs and reflects on how they relate to their project work and their professional behaviour as they work on this project.	Describes refinements to the project aims and objectives with some justification. Amends plan appropriately. Some risks considered. As for Grade 1 but perhaps omits or inappropriately assesses an obvious LSEPI or necessary change in their project work or professional behaviour.	Refinements proposed may be too modest or too radical. Rationale for changes is not always clear. Risks not always realistically assessed. As for Grade 2 but omits or inappropriately assesses more than one obvious LSEPI or necessary change to their project work or professional behaviour.	As Grade 3 but does not make adequate refinement in light of progress so far. Formulates new plan in a generic or 'rote' fashion. Nominal treatment of risks, if at all. Limited evidence of appropriate identification of LSEPIs or how they relate to their project work and their professional behaviour.	Makes inappropriate changes, perhaps even for the sake of 'form'. The revised plan is not well formulated and risks are not considered. No evidence of ability to recognise LSEPIs and understand how they relate to their project work and professional behaviour.
LO4. Gather, analyse and evaluate relevant information to complete the project successfully. **LO6**. Make effective use of a variety of information sources including the internet, demonstrating awareness of the credibility of the source. **LO7**. Communicate information, ideas, problems and solutions clearly.	Has continued to find relevant material, from a range of sources, clearly showing an understanding of the credibility and significance of the source of information. Effectively and succinctly identifies how they can contribute to the work to be done. A very clear, readable piece of work. Makes good use of language, diagrams, tables, etc. where necessary. Few or no spelling or grammatical errors.	The quality or relevance of the sources of information may be more diverse and credibility and authority of some of the sources may be less clear. How they relate to the project may be less clear. A clear, readable piece of work. Makes use of language, diagrams, tables, etc. where necessary. Few spelling or grammatical errors.	. The relevance, credibility or authority of many of the sources of information is unclear. Readable work with some issues in the appropriate choice or use of communication methods.	Very few additional sources of information have been identified or sources may be lacking relevance, credibility and/or authority. They may be out of date. They may bear only general relevance to the project. Sources mainly based on OU modules. The basic ideas have been communicated, but not using the best methods and often unclearly.	Sources of information are very general, have little credibility or authority and it is not clear that they contribute at all to the work to be done. The basic ideas to communicate have not been presented in a comprehensible manner. Inappropriate use of diagrams, tables etc.

Learning Outcome					
LO1. Demonstrate and apply a systematic understanding of the fundamental technical concepts and principles relevant to your project. **LO11**. Analyse a practical problem and devise and implement a solution, building on the knowledge and skills developed throughout your earlier OU studies and experience.	The work makes demonstrable correct use of concepts and principles from the literature and/or prior OU study. Has successfully undertaken purposeful project work that addresses one or more of the core aspects of the problem and its solution.	The use of concepts and techniques is sound and any misunderstandings are minor. Has progressed with project work addressing a valuable but more routine aspect of the project without addressing the heart of the solution.	Comprehension and use of concepts and principles is less secure and there are several identifiable errors in the work that need correcting. Work may be either inappropriately ambitious or appropriately focused but underdeveloped.	Comprehension and use of concepts and principles is insecure and there are many errors to be corrected. Some project work undertaken but it may be underdeveloped or have focused on issues that are very peripheral to the successful outcome of the project.	Very little evidence that concepts and principles are understood. Little or no work undertaken. Much or all of it may have very little relevance to the eventual solution/deliverable. A mark of 0% means no project work has been undertaken.
LO8. Learn independently and reflect on what has been done, with a view to improving skills and knowledge.	Clearly identifies examples of how they work effectively and factors that frustrate effective work. Is clear about how factors impeding effective work can be addressed.	Identifies some examples of how they work effectively and factors that frustrate effective work. Less clear about how they will respond.	Some evidence of reflection on effective and ineffective ways of working.	Finds it difficult to identify factors that lead to effective or ineffective working.	Very limited evidence of self-awareness in relation to effective or ineffective working.

LO3. Identify, list and justify the resources, skills and activities needed to carry out the project successfully. Identify and address any associated risks. **LO9**. Plan and organise your project work appropriately, and keep systematic records of plans, progress and outcomes.	Has identified the resources, skills and activities, the timely availability of which is essential. Considers when the assessment of risks has been good or weak. Makes an accurate assessment of progress in relation to the original plan. Understands what has gone well and what has not gone to plan and, more importantly, why.	Has missed at most a couple of less important resources, skills and activities. Some consideration of how effective the risk assessment has been. Makes an accurate assessment of progress in relation to the original plan. Identifies things that have gone well and some things that have not gone to plan, but is not always clear why.	Has missed an important and obvious resource, activity, skill or risk. As for Grade 2 but the review is less accurate, perhaps a degree of 'denial' about what has not gone so well.	Identifies only 'routine' resources, skills, activities and risks. The review is formulaic. Few lessons are drawn.	Has still not developed an adequate list of key resources, skills and activities. No risk identification. Inaccurate review that doesn't recognise when things have gone well or not.

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