## **Faculty of Computer Studies**

#### TM471 Project

# **Ethics, Legality, and social issues:**

- As per AOU rules and regulations, all students are required to submit their own report work and avoid plagiarism. The AOU has implemented sophisticated techniques for plagiarism detection. You must provide all citations and references in case you use and quote another person's work in your report. You will be penalized for any act of plagiarism as per the AOU's rules and regulations.
- Students should be aware of legal issues such as IT laws, local laws, and spectrum licensing issues.
- Students should give credit to others who helped them as shown below in the acknowledgments. The students acknowledge their peers, supervisors, trainers, or any stakeholder that helped or contributed to the completion of the project.
- Awareness of relevant legal requirements governing all activities, including personnel, health and safety, contracts, intellectual property rights, product safety, and liability issues.
- Awareness of risk issues, including health and safety, and environmental and commercial risk.
- Students should provide clear evidence for the consideration of social, professional, legal, and ethical issues in relation to the project.

 For part A, write one or more paragraphs at the end of chapter 3 to explain them (up to this stage of work).

 For part B, add a section in chapter 5 to explain them completely and clearly.

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## Plagiarism:

All work you submit must be yours and in your own words. Your tutor has tools available to him/her to detect plagiarism from the Internet and from other colleagues. Tutors will also manually check your TMAs and reports for similarity. If you copy material that is not your own and submit it as your own, you are committing plagiarism. Plagiarism is a serious offense and if a case of plagiarism is detected, the Arab Open University will apply severe penalties and disciplinary procedures.

## **Standard Report Format**

**Abstract.** This should be two or three short paragraphs (100-150 words total), summarizing the dissertation. It is important that this is not just a restatement of the original project outline. A suggested flow is background, project aims, and main achievements. A bad abstract would have a final paragraph that just says "The achievements will be described" - This is useless, as it says nothing. From the abstract, a reader should be able to ascertain if the project is of interest to them and presents results about which they would like to know more details.

**Acknowledgments.** Thanks to whoever may have helped you in any way - both serious and a bit of fun.

**Contents.** Includes titles and page numbers of all sections and subsections. Chapter 1 begins on page 1. Use Roman numerals for all previous pages, e.g., title page (i), signed declaration (ii) abstract (iii), acknowledgments (iv), and contents (v-?).

It is often best to include a separate list of all the figures in the dissertation (figure number, label, page number), and a separate list of all tables in the dissertation (table number, label, page number).

Chapter 1: Introduction. The introduction has several purposes. Clearly one is to set the scene for the project by giving a little relevant background information - try to grab the reader's interest early. Another is to clearly elucidate the aims and objectives of the project and the constraints that might affect the way in which the project is carried out. If the project involves the solution of a specific problem or the production of a specific system this should be clearly specified in an informal way. Finally, the introduction should summarize the remaining chapters of the dissertation, in effect giving the reader an overview of what is to come.

The type of project will dictate the content and structure of the following chapters and you should discuss this with your supervisor. For example, for a theoretical project, it is likely that several chapters will be devoted to constructing the theoretical foundations for the project and will consist of your own interpretation and synthesis of existing work with suitable examples

discussed throughout. A sequence of chapters that cover theoretical framework, conditions and assumptions, and theory application and comparisons may be appropriate. For an experimental project, the experimental goals, design, execution, and evaluation might be covered. What now follows is a typical structure for a 'design and build' project.

#### **Chapter 2: Literature Review**

The title of this chapter is open to discussion. The literature review is a bit simplistic, and it may be that you can title the chapter better, based on the particular type of project that you are doing.

It is often useful to start this chapter with an overview of its contents, giving the reasoning behind why you have structured it in a particular way. The main thrust of the chapter is a review of relevant work by other authors and the relationship between this and your own work. If several other people have done closely related work in a different way, then the reasons for your approach should be summarized here.

A good literature review is synthetic: general trends and positions in your research area should be identified, and the papers you cite should be compared and contrasted. You must include, at least three related works, and then you must compare them with other works.

A literature review is not simply an annotated list of papers you may have read. It should cover a range of relevant material to your project. Everything you use should be cited by reference to the bibliography at the end of your dissertation. Follow the university referencing guidelines.

Everything that you write must be in your own words and you must cite other people using references. You may also quote sentences from the work of others. These must be included in quotation marks and again the relevant work must be cited. Your signed declaration means that you will fail your dissertation if you do not acknowledge the work of others.

(This chapter must not be less than 5 pages of text (not including the figures, tables, diagrams, etc.))

Chapter 3: Requirements and analysis. This should state, in a more detailed way, the objectives of the project by requirement and the analysis should break the problem down into manageable steps. There may be more than one suitable approach; the analysis may cover more of the area than is finally implemented. Suitable diagram techniques (e.g. Flow chart, DFD, UML, other drawings) should be used where appropriate. If a method is applied selectively, explain which parts were used and why. Experimental projects should pay careful attention to control conditions, samples selected, etc. to ensure a valid result. Testing and evaluation should be given due consideration. It is important that you state how you will evaluate your work. For a design project, it is appropriate to consider testing at the same time as specification.

Chapter 4: Design, Implementation, and Testing. This should explain the design technique chosen (and justify why it is appropriate) from the various ones available; it should select a

suitable subset of the things described in the analysis chapter and develop a design. Where trade-offs exist between different designs, the chosen approach should be justified. In addition to illustrating "coding traps", this should highlight novel aspects of algorithms. Testing should be according to the scheme presented in the Analysis chapter and should follow some suitable model - e.g., category partition, state machine-based. Both functional testing and user-acceptance testing are appropriate. For experimental/investigative projects, techniques developed should be evaluated against a standard result set for calibration, as well as the "live" data set. For theoretical projects, the relative power/expressiveness of the theory should be evaluated with respect to competing approaches.

**Chapter 5: Results and discussion.** The main results of your work should be presented, together with critical discussion. The chapter should cover four things (You should use them as section headings):

- Findings present all the results (products, experimental findings, theories, etc.) generated during the project. This may also include some off-topic findings that were not expected, or which were side-effects of other explorations.
- Goals achieved describes the degree to which the findings support the original objectives laid out for the project. The goals may be partially or fully achieved or exceeded. An experimental project may prove or disprove the original thesis. A theoretical project may cover some or all the example cases. Note that reporting of failures to achieve goals is important since a fundamental feature of the assessment procedures is that the processes (how you went about your project) are often as important as the products of the project.
- Further work describes two things: firstly, new areas of an investigation prompted by developments in this project, and secondly parts of the current work which were not completed due to time constraints and/or problems encountered.
- Explanation of the ethical, legal, and social issues related to your project.

**Chapter 6: Conclusions.** The conclusions can be summarized in a short chapter (2 or 3 pages). This chapter brings together many of the points that you will have made in other chapters, especially in the previous results and discussion chapter. Do not be afraid of repeating some of your earlier statements here, albeit using different wording.

#### References

You must use the Harvard referencing system in your assessments.

#### **Appendices**

Other than the information that you would like to show in this part, also be noted that one or more of the following may be included:

- 1-Including a letter of approval/permission from the company/organization in which the students do the project (if any).
- 2-Questionnaire questions, interview questions, and a letter from any organization's head in which a student has collected information (in any way) to confirm that the information is legal, true, and verified.