Assignment Guidance and Front Sheet

This front sheet for assignments is designed to contain the brief, the submission instructions, and the actual student submission for any WMG assignment. As a result the sheet is completed by several people over time, and is therefore split up into sections explaining who completes what information and when. Yellow highlighted text indicates examples or further explanation of what is requested, and the highlight and instructions should be removed as you populate 'your' section.

This sheet is only to be used for components of assessment worth more than 3 CATS (e.g. for a 15 credit module, weighted more than 20%; or for a 10 credit module, weighted more than 30%).

To be <u>completed</u> by the <u>student(s)</u> prior to final submission:
Your actual submission should be written at the end of this cover sheet file, or attached with the cover sheet at the front if drafted in a separate file, program or application.

| **Student ID or IDs for group work** | e.g. 1234567 |

To be <u>completed</u> (highlighted parts only) by the <u>programme administration</u> after approval and prior to issuing of the assessment; to be <u>consulted</u> by the <u>student(s)</u> so that you know how and when to submit:

Date set	24/11/22
Submission date (excluding extensions)	31/01/23
Submission guidance	See assessment brief.
Marks return date (excluding extensions)	20 working days from the date of submission.
Late submission policy	If work is submitted late, penalties will be applied at the rate of **5 marks per University working day** after the due date, up to a **maximum of 10 working days** late. After this period the mark for the work will be reduced to 0 (which is the maximum penalty). "Late" means **after the submission deadline time as well as the date** – work submitted after the given time even on the same day is counted as 1 day late.
Resubmission policy	If you fail this assignment or module, please be aware that the University allows students to remedy such failure (within certain limits). Decisions to authorise such resubmissions are made by Exam Boards. Normally these will be issued at specific times of the year, depending on your programme of study. More information can be found from your programme office if you are concerned. **If this is already a resubmission attempt, this means you will not be eligible for an additional attempt. The University allows as standard a maximum of two attempts on any assessment (i.e. only one resubmission). Students can only have a third attempt under exceptional circumstances via a Mitigating Circumstances Panel decision.**

To be <u>completed</u> by the <u>module owner/tutor</u> prior to approval and issuing of the assessment; to be <u>consulted</u> by the <u>student(s)</u> so that you understand the assignment brief, its context within the module, and any specific criteria and advice from the tutor:

Module title & code	WM241-18: Human-Behaviour in Cyber Systems
Module owner	Elzbieta Titis
Module tutor	Elzbieta Titis
Assessment type	**CW3: Security and usability trade-offs (Report)**
Weighting of mark	20%

Assessment brief

CW3: Security and usability trade-offs

You are required to analyse the security and usability of a system based on a security-usability threat model by Kainda et al. (2010). To do so, you will employ usage scenarios and threat scenarios to understand and identify both system and external elements that are threats to a system's usability, security, or both. You will follow five steps:

1. Identify usage scenarios. In HCI, usage scenarios are identified before a usability evaluation. The scenarios are specific tasks that a typical user of a system would endeavour to accomplish.

2. Identify threat scenarios. HCISec is also concerned about legitimate users making mistakes that break security of a system. The goal here is to measure how easy legitimate users may unknowingly break a system.

3. Assess difficulty-of-use of usage scenarios. Usability of usage scenarios is important. Users should perform them with minimal physical and mental effort. It is, therefore, crucial to identify and minimise or eliminate elements that introduce difficult-of-use into a system.

4. Assess easability-of-use of threat scenarios. Users follow the path of least resistance. Threat scenarios are the direct opposite of usage scenarios. The goal here is to understand how easily users can access them.

5. Make recommendations. The final stage is making recommendations based on the preceding steps. Recommendations will be in the form of areas that need improving to make usage scenarios easily accessible to legitimate users and also areas that need to be hardened for threat scenarios. Ideally, they will be based on the right trade-offs between security and usability.

You should write an executive report of no more than two (2) pages that discusses 3 usage scenarios and 3 threat scenarios. There is no word count for this coursework as long as you adhere to the requirements of the submission: a) Up to two pages report; and b) any additional work/ notes submitted in an appendix.

You should use a clear font in a font size that would be readable when printed in A4 size paper. Recommended font size 10-12pt, margins 1.27 cm.

If you utilise any appendices, then you should refer the reader to the relevant appendix within your report, otherwise the appendix will not be considered.

You must use the Harvard referencing system.
All submissions should be made in PDF format via Tabula https://tabula.warwick.ac.uk.

Word count	NA
Module learning outcomes (numbered)	1. Design, implement, and evaluate an interface for a well-defined community of users to interact with an application to achieve worthwhile user objectives; 2. Analyse the relationship between the human-computer interface, user behaviour, and cyber security consequences.
Learning outcomes assessed in this assessment (numbered)	1, 2.
Marking guidelines	You will be marked based on the following criteria: 1. *Completeness of the analysis* 2. *Consideration of issues/ scenarios* 3. *Justification of arguments* 4. *Presentation and design* **Please also refer to the University Marking Scale (attached below).**
Academic guidance resources	Links to handbook/resources. Lectures/seminars. Additional guidelines, if necessary, will also be provided in a class briefing session.

Marking scale

Class	Scale	Mark	Descriptor
First	Excellent 1st	100	Work of original and exceptional quality which in the examiners' judgement merits special recognition by the award of the highest possible mark.
		94	Exceptional work of the highest quality, demonstrating excellent knowledge and understanding, analysis, organisation, accuracy, relevance, presentation and appropriate skills. At final-year level: work may achieve or be close to publishable standard.
	High 1st	88	Very high quality work demonstrating excellent knowledge and understanding, analysis, organisation, accuracy, relevance, presentation and appropriate skills. Work which may extend existing debates or interpretations.
	Upper Mid 1st	82	
	Lower Mid 1st	78	
	Low 1st	74	
Upper Second (2.1)	High 2.1	68	High quality work demonstrating good knowledge and understanding, analysis, organisation, accuracy, relevance, presentation and appropriate skills.
	Mid 2.1	65	
	Low 2.1	62	
Lower Second	High 2.2	58	Competent work, demonstrating reasonable knowledge and understanding, some analysis, organisation, accuracy, relevance, presentation and appropriate skills.
	Mid 2.2	55	
	Low 2.2	52	
Third	High 3rd	48	Work of limited quality, demonstrating some relevant knowledge and understanding.
	Mid 3rd	45	
	Low 3rd	42	
Fail	High Fail (sub Honours)	38	Work does not meet standards required for the appropriate stage of an Honours degree. Evidence of study and demonstrates some knowledge and some basic understanding of relevant concepts and techniques, but subject to significant omissions and errors.
	Fail	32	Work is significantly below the standard required for the appropriate stage of an Honours degree. Some evidence of study and some knowledge and evidence of understanding but subject to very serious omissions and errors.
		25	Poor quality work well below the standards required for the appropriate stage of an Honours degree.
	Low Fail	12	
Zero	Zero	0	Work of no merit OR Absent, work not submitted, penalty in some misconduct cases