

**Semester I 2023/2024**

Subject : Technology and Information Systems (SECP 1513)

Section : 01/02/03/04/05/06/07/MJIT

Task : Design Thinking

Due : 23/11/2023 (Report & Video); Presentation as scheduled.

(submit softcopy (.docx) with formatting via e-learning & a copy in your e-portfolio)

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## Instruction:

Students are required to write a group report, video and presentation (4-5 students). Design thinking is a process of critical thinking used to develop solutions to problems through collaboration, innovation and design. Design thinking helps prepare student for a world where skills such as teamwork, problem solving, communication, analysis, creativity and the ability to influence others is becoming increasingly important in the work force. Students need to record and document all the process in design thinking which empathy, define, ideate, prototype and testing.

*More details on how to write the report, please refer to:* <https://www.theclassroom.com/write-academic-report-5453496.html>

There are 3 type assessment in the design thinking:

1. This report will be 10% of the course assessment.
2. Video will be 5% of the course assessment.
3. Presentation will be 5% of the course assessment.

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1. **REPORT-10%**

The write a report on:

1. Introduction
2. Detail step and descriptions in design thinking and evidence for each phase (e.g use the video, image and log journal, team progress, brainstorm idea and others.)
3. Detailed descriptions include problem, solution and team working
4. Design thinking assessment points, when should assessment happen
   1. During the end of the project demonstration
   2. During the transition between design thinking phases
5. Design thinking evidence
   1. The sample work by students working to solve the design challenge
   2. Record for each phase
      1. Empathy: list of possible question and answer for user, and the composite character (User: age, background, and others)
      2. Define: the list of define (e.g unfulfilled Felicity needs to evaluate career possibilities based on emotion)
      3. Ideate: Brainstorm process
      4. Prototype: How the prototype is developed?
      5. Test: Test the prototype to the user
6. REFLECTIONS (INDIVIDU):
   1. What is your goal/dream with regard to your course/program?
   2. How does this design thinking impact on your goal/dream with regard to your program?
   3. What is the action/improvement/plan necessary for you to improve your potential in the industry?
7. The task for each member

You are encourage to ask questions and find out more about design thinking. The limit for the report is 1000 - 1500 words. You may also include tables/figures to support your content (excluded from the word limit).

*Note: Item (3) is the most important content of your report, please write your opinion and views based from the questions.*

Every student should write the report in your own words. **PLAGARISM of the content is prohibited.** If any of the content is known to be copied from other website/review/blogs, you will be given **0 mark**!! You can get photos/information from other resources, but you must **include credits (in citation/link)** to the original owners.

**Report Rubric -10%**

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Excellent**  **10-7** | **Fair**  **6-4** | **Basic**  **3-0** |
| **Contents** | Report contents: Introduction, Details of design thinking process, Detailed Descriptions include problem, solution and team working during the design thinking process | | |
| All contents included | Included but not well covered | Included but poorly covered |
| **Reflection** | * 1. What is your goal/dream with regard to your course/program?   2. How does this design thinking impact on your goal/dream with regard to your program?   3. What is the action/improvement/plan necessary for you to improve your potential in the industry? | | |
| Excellent explanation of point 1-3. | Fair explanation of point 1-3. | Poor explanation of point 1-3. |
| **Organization** | Good organization, points are logically ordered. | Some organization, points are jumpy. | Poorly organized, no logical progression. |
| **Design thinking phase** | Good descriptions and information flow are well organize. | Some information flow are jumpy. | Poorly organized, no logical information flow. |
| **Empathy** | Good descriptions of user empathy, including variety of insights and deep needs | Limited descriptions of user empathy. | Little to no descriptions of user empathy |
| **Define** | The original challenge is clearly re-framed around a user where needs are stated as verbs to describe an activity or desire for an area where that user needs help | The original challenge is not clearly re-framed. | The original challenge is not re-framed. |
| **Ideate** | Divergent thinking results in a large, diverse range of ideas and concepts. Selecting a few | Convergent thinking results in limited range of ideas and concepts. | Few ideas generated. |
| **Prototyping** | Prototyping provides a solution for user needs. | Prototyping provides partial solution for user needs. | Little or no prototyping accomplished. |
| **Test** | Demo and test the prototyping to the users. | Demo and test partial prototyping to the users. | Little or no prototyping testing. |
| **Formatting & table of content** | Good use of fully formatting in MS Word | Fairly use of formatting in MS Word | Poorly use of formatting in MS Word |
| **Use of Tables & Figures** | Extensive use of tables and figures effectively to show the understanding regarding the topic. | Limited use of some tables or figures to show the understanding regarding the topic | No tables and figures are used. |
| **Grammar, Usage, and Spelling** | No errors. | Some errors. | Numerous errors distract from understanding |
| **Timeliness** | Report on time | Report one day late | Report more than one day late |

1. **Video -5%**

Students are required to create a video using any related software based on the theme given by the lecturer. The video include:

1. Introduction
2. Detail step and descriptions in design thinking and evidence for each phase (e.g use the video, image and log journal, team progress, brainstorm idea and others.)
3. Detailed descriptions include problem, solution and team working
4. Design thinking assessment points, when should assessment happen
   1. During the end of the project demonstration
   2. During the transition between design thinking phases
5. Design thinking evidence
   1. The sample work by students working to solve the design challenge
   2. Record for each phase
      1. Empathy: list of possible question and answer for user, and the composite character (User: age, background, and others)
      2. Define: the list of define (e.g unfulfilled Felicity needs to evaluate career possibilities based on emotion)
      3. Ideate: Brainstorm process
      4. Prototype: How the prototype is developed?

The limit time for the video is 4-5 minutes.

**Video Rubric -5%**

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| **Criteria** | **Excellent**  **10-7** | **Fair**  **6-4** | **Basic**  **3-0** |
| **Contents** | It covers all the topics in depth with details and examples. The knowledge of the topic is excellent | It includes essential information about the topic. The content seems to be good. But it has 1-2 mistakes in the facts  The content includes minor details and it has several mistakes in the facts. | The content includes minor details and it has several mistakes in the facts. |
| **Originality** | The product @ video shows great originality. The ideas are creative and witty. | The product @video shows certain originality. It also uses ideas from other people (quoting them).  The student uses ideas from other people without quoting them. | The student uses ideas from other people without quoting them. |
| **Effective use of the software/ app** | The student uses an adequate software or app. The student creates a video that show a wide range of features of the software or app in an engaging dynamic way. | The student uses an adequate software or app. The video shows problems with the use of the features of the software/ app. Quite a lot of more practice is needed. | The student does not use an adequate software or app. |
| **Clarity** | The overall quality of the video and the focus were excellent. | The quality of the video is not very good but the overall focus was excellent | The quality of the video and the focus are not very good. |
| **Media** | Multimedia | Video, text,image | Text, image |
| **Time Limit** | Less 3 minutes | More 5-4 minutes | 10-6 minutes |

1. **PRESENTATION- 5%**

Present in the class as scheduled.

**Rubric Presentation**

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| --- | --- | --- | --- |
| **Criteria** | **Excellent**  **10-7** | **Fair**  **6-4** | **Basic**  **3-0** |
| **Eye Contact** | Hold attention of entire audience  with the use of direct contact, seldom looking at notes. | Consistent use of direct eye contact  with audience, but still returns to notes. | Display minimal eye contact with  audience, while reading mostly from the notes. |
| **Body Language** | Movement seems fluid and helps the  audience to visualize. | Made movement or gestures that  enhance articulation. | Very little movement or descriptive  gestures. |
| **Verbal Skills** | Highly responsive to audience comments and needs. Consistently clarifies, restates, and responds to questions. Summarizes when needed. | Generally responsive to audience comments and needs. Most of the time, clarifies, restates, and responds to questions, and  summarizes when needed. Misses some opportunities for interaction. | Reluctantly interacts with audience. Responds to questions inadequately. |
| **Organization** | Student presents information in logical, interesting sequence which  audience can follow. | Student presents information in logical sequence which audience  can follow. | Audience has difficulty following the presentation because student jumps  around. |
| **Creativity** | Very high creativity level. Student uses many graphics, pictures, video etc.  Related, attractive and effective | High creativity level.  Student uses many graphics, pictures, video etc.  Related and effective. | Moderate creativity level. Student uses moderate graphics, pictures, video etc.  Unrelated. |
| **Personal Appearance** | * Follow UTM Smart Day dress code * Polite to examiners * Positive attitude | * Casually dressed * Polite to examiners * Passive attitude | * Does not follow UTM Smart Day dress code * Impolite to examiners |
| **Question and answer session** | * Able to answer all questions * Answers reflect project understanding | * Able to answer some questions * Some answers are irrelevant to project objectives | * Unable or not attempting to answer questions or answers reflect lack of project understanding |