**UI/UX Advanced Evaluation Report**

CMGTwitch

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466301

Contents

[1. Usability testing protocol 3](#_Toc89345447)

[1.1. Procedure 3](#_Toc89345448)

[1.2. User tasks 3](#_Toc89345449)

[1.3. Measurements 3](#_Toc89345450)

[2. Usability testing results 4](#_Toc89345451)

[2.1. Individual Results 4](#_Toc89345452)

[2.2. Actions points 5](#_Toc89345453)

[3. Unmoderated A/B testing protocol 6](#_Toc89345454)

[3.1. A/B conditions (Max. 2 sentences) 6](#_Toc89345455)

[3.2. Hypothesis (Max. 1 sentence) 6](#_Toc89345456)

[3.3. Variables 6](#_Toc89345457)

[3.4. User tasks 7](#_Toc89345458)

[3.5. Survey 7](#_Toc89345459)

[4. Unmoderated A/B testing results 7](#_Toc89345460)

[4.1. Survey raw data 7](#_Toc89345461)

[4.2. Processed results 7](#_Toc89345462)

[4.2.1. Box plots (Optional for Good) 8](#_Toc89345463)

[4.2.2. Conclusion (Max. 5 sentences) 8](#_Toc89345464)

[4.3. Future work (Optional for Good) 9](#_Toc89345465)

[4.4. Reflection (Optional for Excellent; Max. 3 sentences) 9](#_Toc89345466)

# Usability testing protocol

## Procedure

-Step-by-step procedure that you will follow for your test.-

1. My solution is CMGTwitch, which is the online environment where lectures/online classes can be followed, and recordings be watched.
2. Ask for permission to record screen/voice
3. Start prototype with <https://nilsmeijer349496.invisionapp.com/prototype/ckx6h0c6i006f2i01nyt943nw/play>
4. Start task 1 (observe ONLY, say nothing, even when failing). Record test.
5. See 2.1.

## User tasks

-State the actions you will ask the user to perform with your prototype. More tasks will allow you to get more feedback on your prototype. Copy-paste the table as necessary.-

|  |  |
| --- | --- |
| **Task 1** | Navigate to the 3D Rendering course page. |
| **Success criteria** | The task is successful if the user is viewing the course page. |

|  |  |
| --- | --- |
| **Task 2** | Find the recording of the lecture of 3D Rendering on December 6th. |
| **Success criteria** | The task is successful if the user is located in the recording player. |

|  |  |
| --- | --- |
| **Task 3** | Hide the controls in the video player. |
| **Success criteria** | The task is successful if the user only sees the small button for unhiding the controls. |

## Measurements

-List what type of data you will collect, and how, from the tester before, during or after the test-

I will only measure these metrics for one task (the first, to ensure consistency) per tester, since the user will already know how to get to a certain page after performing the first task.

|  |  |
| --- | --- |
| **Metric** | **Process** |
| Time to completion (seconds) | I will measure the time it takes for the user to complete the task |
| Page on which the most time was spent (seconds) | I will measure (watch recording for this) how many seconds the user spends on each page, and note which page has taken the longest. |

Tester 1 – Nienke Steinvoort

|  |  |
| --- | --- |
| **Metric** | **Process** |
| Time to completion (seconds) | 24s |
| Page on which the most time was spent (seconds) | Login page: 5s  Courses overview: 19s |

Tester 2 – Stephanie Temmink

|  |  |
| --- | --- |
| **Metric** | **Process** |
| Time to completion (seconds) | 28s |
| Page on which the most time was spent (seconds) | Login page: 3s  Course overview: 25s |

Tester 3 – Matthijs Bruins

|  |  |
| --- | --- |
| **Metric** | **Process** |
| Time to completion (seconds) | 26s |
| Page on which the most time was spent (seconds) | Login page: 3s  Course overview: 23s |

# Usability testing results

## Individual Results

-Makes notes of the usability tests and fill in the feedback grid for each participant. You need at least 3 testers.-

|  |  |
| --- | --- |
| Tester 1 – Nienke Steinvoort - 475527 |  |
| Likes   * The “chat-panel” on the right of the screen, in the lobby window. * The announcement tab on the right in the course overview. | Criticisms   * Feels overwhelmed by the amount of text on the main overview * Feels like the focus is on the course’s *content* instead of the classes themselves. * Strange placement of the webcam view. * Unclear which of the lobbies is currently live (as in, class being taught as we speak) |
| Questions   * How do you get the chat back up after clicking “hide chat”? * What happens after clicking “mute session”? | Ideas   * Add the term’s project to the courses * Decrease text size (and decrease button size) * Change webcam placement to top-right (and for recordings: stretch the recording’s “timeline” to cover the full width (excluding chat-panel) |
| **Summary:** Likes the overall concept, some criticism/ideas regarding the size and placement of elements. The focus should be placed more on giving live lessons instead of a “replacement of BlackBoard”. | |

|  |  |
| --- | --- |
| Tester 2 – Stephanie Temmink - 469722 |  |
| Likes   * Layout makes sense/is logical | Criticisms   * A lot of text (in particular on the main page), a lot of elements * “Announcements” tab on course details page is relatively small * Doesn’t like the “personal details” element on the main page |
| Questions  --------- | Ideas   * Would relocate the “personal details” element to a dedicated “account” page, or in a corner of the page |
| **Summary:** Would separate the personal details and dedicate an account page to it, and decrease the amount of text & the size of the elements on the main page and possibly the course details page. Likes the rest of it. | |

|  |  |
| --- | --- |
| Tester 3 – Matthijs Bruins - 478260 |  |
| Likes   * Likes the fact that you don’t have to dig through the tree of “ACT > CMGT” and finally end up at the courses * The search bar on the course *overview* page makes sense, because there are a lot of pages to navigate to * Loves the hierarchical tree on the main page, where you select the year > term > role, so that the courses get filtered based on the choices | Criticisms   * The “personal details” element doesn’t need to be on every page, especially on the course details page it’s rather unnecessary * Didn’t expect the “cross” button in the recording/live session player would hide the controls * No need for the search bar on the course details page * Feels overwhelmed by the amount of buttons and text on the main course page * Background colour is too dark, pulls too much attention (colour palette has not been applied in the Lo-Fi and is subject to change during the Hi-Fi development) * Sort the upcoming & past classes on date |
| Questions   * Wonders what the “recents” header means on the course details page (documents that have been added recently?) | Ideas   * Should be able to select what year (2020-2021, 2021-2022 etc) on the main page. Doesn’t have to stand out, but the option should be there |
| **Summary:** A lot of points to improve upon, but also many things that have been well thought out.  Colour palette is important to decide where focus should be laid upon. | |

## Actions points

-Summarize the outcome of the usability testing in terms of improvements that need to be made to the prototype. Be specific about the improvements that the prototype will undergo and add a screenshot of the relevant Lo-Fi prototype section so the teacher can see the usability problem.-

1. A screenshot of a computer

   Description automatically generated with medium confidenceProblem: the course overview felt overwhelming due to large elements/large font size. (circled red).

Solution: the elements should be resized to the same size as those circled yellow (or perhaps even smaller.

1. Graphical user interface, application

   Description automatically generatedProblem: the “details” tab on the course overview page is unnecessary, since it’s not something that’s needed very often.

Solution: a separate “Profile”/”Account” page is required, where that kind of info is shown.

1. Graphical user interface

   Description automatically generated with low confidenceProblem: it wasn’t clear that the cross-button (circled red) would hide the controls of the video player.

Solution: consider changing the cross icon to a text element saying “hide controls”.

1. Problem: the term’s project isn’t included in the overview.

Solution: to adhere to the previously mentioned improvements by decreasing the elements size/font size, consider a different element shape, or shrink the sizes even further so that the project fits as well.

1. Graphical user interface, application, Teams

   Description automatically generatedProblem: the webcam placement feels strange.

Solution: consider relocating it to (for example) the top right of the screen

1. Graphical user interface

   Description automatically generated with medium confidenceProblem: a “college-year” button is missing (to select a schoolyear, such as 2020-2021, 2021-2022 etc).

Solution: add a small (doesn’t have to stand out, but the option should be there) button to allow for that possibility. For example, it could be placed somewhere in the red area.

1. Table

   Description automatically generatedProblem: it’s not quite clear to some testers what these elements are supposed to be (a link to the course page? A shortcut to a live lecture, or a recording?)

Solution: replace this element with a schedule, where classes that are live will be highlighted and can be clicked on which leads to the online lobby.

1. A picture containing diagram

   Description automatically generatedProblem: it’s not clear what this means. Are the elements files/folders that have been added recently?

Solution: change “Recents” into “Recently used”

# Unmoderated A/B testing protocol

## A/B conditions (Max. 2 sentences)

-Explain the difference between the two versions of your prototype/application. Make sure there is only one thing you are changing so your experimental results are valid.-

In version A, the schedule is displayed in a grid-list combination (with all of the schoolweeks of that term displayed, for all the courses including the project). The most important information (timeframe, date) is immediately visible.

In version B, the schedule is displayed in more of an “agenda” kind of layout. The user is able to switch between weeks. All of the information is visible, but only for the currently selected week, instead of all weeks at once.

## Hypothesis (Max. 1 sentence)

-State what you believe will change, in terms of user behavior, between conditions A and B.-

Comparing B to A, if the user is more visually oriented, it’s easier to find a specific lecture/lab because it’s displayed in an “agenda”-styled manner, while in A, the way the schedule is displayed is less visual (users who are more text oriented will find this easier to read and navigate).

## Variables

-List the aspect of the experiment that you are controlling and changing (independent variable – there should only be one), what is affected by that change (dependent variables), and what aspects you have no control over but could affect the results (confounding variables).-

|  |  |
| --- | --- |
| **(EXAMPLE TABLE - DELETE WHEN SUBMITTING)** | |
| **Independent variable** | Layout of the “outside events” list |
| **Dependent variable(s)** | * Search time for an event * Ease of use * User engagement |
| **Confounding variable(s)** | * Screen resolution/size |

|  |  |
| --- | --- |
| **Independent variable** | Layout of the schedule |
| **Dependent variable(s)** | * Search time for a certain piece of information (e.g. timeframe for a class) * Fulfillment of information “desires” (was the user able to find all of the information they were looking for). |
| **Confounding variable(s)** | * Amount of experience with schedule & agenda layouts * Possibility of dyslexia |

## User tasks

-State the actions you will ask the user to perform with your prototype/application. Copy-paste the table as necessary.-

|  |  |
| --- | --- |
| **Task 1** | Find the timeframe at which the 3D Rendering lab on the 24th of December takes place. |
| **Success criteria** | The user has located the lab class for 3D Rendering on the 24th of December, and finds that the lab starts at 11.00 and ends at 13.15. |

|  |  |
| --- | --- |
| **Task 2** | Find out who your study coach is. |
| **Success criteria** | The user has navigated to the “Account” page, and sees that the study coach is Harry Sanderink. |

|  |  |
| --- | --- |
| **Task 3** | Watch the 3D Rendering lecture recording of 6th December. |
| **Success criteria** | The user has navigated to the 3D Rendering course details page, and clicked the lecture recording of 6th December. |

|  |  |
| --- | --- |
| **Task 4** | Find all the users currently present at the live lab class of 3D Rendering on the 17th of December. |
| **Success criteria** | The user has navigated to the 3D Rendering course details page, and clicked the live lab class, and has clicked the “Show users” button. |

## Survey

-Fill in the URL of your survey and the questions you asked your testers. You need at least 4 questions and they should be relevant to your test (should allow you to validate your hypothesis).-

|  |  |
| --- | --- |
| **(EXAMPLE TABLE - DELETE WHEN SUBMITTING)** | |
| **URL** | www.example.com |
| **Type of answer** | **Question** |
| 5-point LIKERT scale | 1. Rate the difficulty of finding the “soccer game” event |
| Open | 2. What did you find most difficult? |

|  |  |
| --- | --- |
| **URL** | <https://forms.gle/pK452gBce6dGnLnCA> |
| **Type of answer** | **Question** |
| Multiple choice | 1. How did you find the 3D Rendering course page? |
| 5-point LIKERT scale | 2. On a scale of 1 to 5, how difficult did you find it to find the timeslot for the 3D Rendering lab class? |
| 5-point LIKERT scale | 3. On a scale of 1 to 5, how difficult did you find it to find the recording for 3D Rendering on the 6th of December? |
| Open | 4. Do you think it’s necessary to have the “Account” page at all? Please explain your answer |

# Unmoderated A/B testing results

## Survey raw data

-Copy-paste the raw data (results) of your survey. These are usually obtained as a table of answers per respondent. Demographic information does not need to be reported here or in the following sections.-

**Condition A**

…

**Condition B**

…

## Processed results

-Fill in the table with the results of your descriptive statistical analysis of the raw data from your survey. You can choose a different way of presenting your data if the table does not provide a good structure but make sure you show, per question and per condition, the required information.-

|  |  |  |  |
| --- | --- | --- | --- |
| **(EXAMPLE TABLE - DELETE WHEN SUBMITTING)** | | | |
| **Question 1 – 5-point LIKERT scale** | | | |
| **Condition A** | | **Condition B** | |
| **Number of testers** | 6 | **Number of testers** | 6 |
| **Mean** | 3.4 | **Mean** | 4 |
| **Median** | 3.5 | **Median** | 4 |
| **Standard deviation** | 1.1 | **Standard deviation** | 0.7 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Question 1 – Type of answer** | | | |
| **Condition A** | | **Condition B** | |
| **Number of testers** |  | **Number of testers** |  |
| **Mean** |  | **Mean** |  |
| **Median** |  | **Median** |  |
| **Standard deviation** |  | **Standard deviation** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Question 2 – Type of answer** | | | |
| **Condition A** | | **Condition B** | |
| **Number of testers** |  | **Number of testers** |  |
| **Mean** |  | **Mean** |  |
| **Median** |  | **Median** |  |
| **Standard deviation** |  | **Standard deviation** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Question 3 – Type of answer** | | | |
| **Condition A** | | **Condition B** | |
| **Number of testers** |  | **Number of testers** |  |
| **Mean** |  | **Mean** |  |
| **Median** |  | **Median** |  |
| **Standard deviation** |  | **Standard deviation** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Question 4 – Type of answer** | | | |
| **Condition A** | | **Condition B** | |
| **Number of testers** |  | **Number of testers** |  |
| **Mean** |  | **Mean** |  |
| **Median** |  | **Median** |  |
| **Standard deviation** |  | **Standard deviation** |  |

## Box plots (Optional for Good)

-Draw a box plot to better understand the results from the A/B testing.-

…

## Conclusion (Max. 5 sentences)

-Discuss if your hypothesis was validated or not using the results of your A/B testing.-

…

## Future work (Optional for Good)

-List a set of recommendations for future work for your prototype/application based on the results of your A/B testing.-

* …
* …

## Reflection (Optional for Excellent; Max. 3 sentences)

-Discuss what went well and what didn’t during the entire A/B testing process. Afterwards, list the things that you would do, or wouldn’t do, differently in the future (think about future modules or projects).-

…

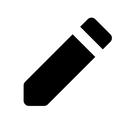
**Dos**

* …

**Don’ts**

* …

RELOCATE THIS

Resources used:

# Edit Icon in Glyph Style

By [Alex Martynov](https://iconscout.com/contributors/rengised)

<https://iconscout.com/icons/edit>

<https://iconscout.com/contributors/rengised>

# 

# Person Icon in Glyph Style

By [Akveo](https://iconscout.com/contributors/eva-icons)

<https://iconscout.com/icon/person-1767893>

<https://iconscout.com/contributors/eva-icons>



My logo

[www.freelogodesign.org](http://www.freelogodesign.org)

“Linotte light” font

By **JCFonts**

<https://www.fontmirror.com/linotte>

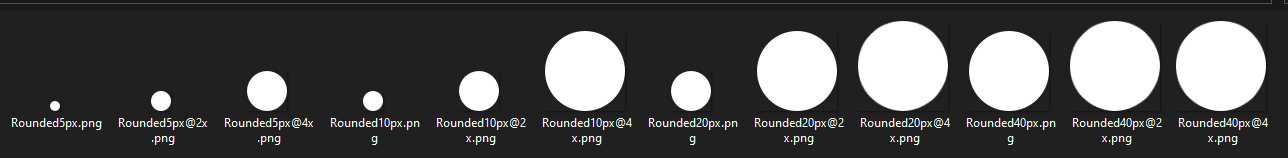


Image pack used to create shapes with rounded corners since Unity doesn’t support it natively and I’m not going to create every unique button asset.

Tutorial used: <https://www.youtube.com/watch?v=gO4jnaxvMjk>

Link to asset pack: <https://www.patreon.com/posts/54505463?s=yt>

Created by: Coco Code