

INF2164 A3: Games User Research

Video due: before tutorial on Nov. 30 / Dec. 3

Documents due: 11:59 pm Dec. 5, 2021 on Quercus

Worth: 18% of your final grade (+2% for self-reflection)

In this assignment, you will conduct games user research to confirm heuristic evaluations and identify new issues in an independent game of your choice and prepare a report in groups of 3-4.

In Assignment 2, you identified some important issues with your selected game through inspection methods. In Assignment 3, you will work to determine whether these issues are indeed present with players, and what other issues they may encounter when playing.

Please use the same group and game as A2.

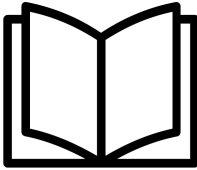

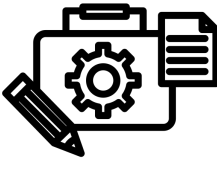

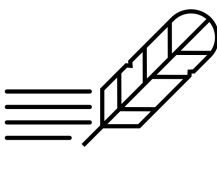
Gameplay observation involves noticing issues players are encountering, being able to note them quickly and concisely, and uncovering the underlying causes of these issues.

Assignment overview:

- Compile a research protocol that identifies 3-5 core research questions related to the issues you would like to test and describes in detail what kind of user research you will run
- Prepare a note-taking guide to use to record participant data during the study
- Run at least one participant per team member, recording gameplay as you go
- Meet as a group to analyze your observations and identify ~5-10 issues
- Find evidence: timestamps, quotes, screenshots and clips of the issues identified
- Prepare and give a 10-minute presentation of your findings
- Perform peer evaluation

In this assignment you will **all observe gameplay**, but you may not all have to do everything else.

In fact, there is a set of non-observation roles each of you may choose to perform:

				
Researcher	Observer	Analyst	Consolidator	Writer
Form research questions	Watch video and report issues	Guide issue prioritization	Gather evidence and find clips	Write report and describe issues

What to do

1. Prepare research protocol

Designate one or more **research leads** to:

- Formulate **3-5 research questions** that are specific to the game and match your most significant issues from A2
- Design the sequence of events that will take place in research sessions with your participants
- Write scripts for each part of the sequence that your teammates will read to the participant verbatim when running the study, and create the informed consent document
- Prepare a note-taking template that contains the script sequence and allows teammates to add observation or interview notes directly on it.
- Pilot test the protocol to ensure that it is going to work in the allotted time.

Due to the small number of participants, the recommended protocol will not include questionnaires or extended gameplay. Make the following two choices:

1. Observation vs Think-aloud
Will you observe gameplay naturally, as if the participant is playing by themselves
OR will you ask the participant to think aloud as they play?
2. Scripted vs Unscripted
Will you ask the participant to perform specific tasks in a sequence
OR will you let the participant play the way they normally would?

Begin with and customize the sample sequence below to your game's needs:

1. Introduction
 - a. Research overview
 - b. Informed consent
2. Gameplay protocol (think-aloud or observation)
 - a. Think-aloud instructions and practice exercise OR observation instructions
 - b. Gameplay (scripted or unscripted)
3. Follow-up
 - a. Semi-structured interview
4. Wrap-up
 - a. Participant thanks

The note-taking template will likely be a spreadsheet, and it should contain columns for participant number (not name), timestamp, and method (e.g., observation, think-aloud, interview) alongside the note contents.

2. Moderate

All of you will **individually** administer the protocol to at least one participant each. To do so,

- Find a way to record your participants' performance remotely (e.g., by recording on Zoom). The participant's voice and gameplay must be recorded, but you may omit their face and webcam feed.
- Recruit one participant each and assign them a unique participant number (e.g., P1)
- Ask your participant to prepare for the session by installing the game and to make sure it will open, but NOT play it before the session.
- In the session, administer the script as written, record video of the participant's gameplay, take notes, and ask follow-up questions as needed.
- After the session, re-watch the video to improve your notes, and transcribe relevant think-aloud statements and interview quotes. All relevant data from your session should end up in your group's note-taking document, tagged with the research method it came from: **observation, think-aloud, or interview**.



Whether you are observing natural gameplay, a think-aloud, or conducting an interview, you will have to take **relevant, comprehensive, and concise** notes about your participant's experience.

You will likely make a note when:

- Something noteworthy happens to the participant in-game (e.g., they struggle with, or misunderstand a game mechanic)
- They say something noteworthy while thinking aloud
- They complete an in-game milestone (beat a level, defeat a boss, etc.) or a task you've set for them
- They respond to an interview question

Reminder: your note should capture or let you infer:

- **What** did the player experience (what is the issue)
- **Why** is the issue occurring (as best you can tell)
- **Impact**: the consequences of the issue on the player's experience
- **Persistence**: is this the first time this has happened

Due to the technical limitations of using Zoom or similar apps to record gameplay, you may not have access to a current on-screen timestamp that can be synchronized with the video. As such, there is **no need** to add timestamps to your notes while in the session.

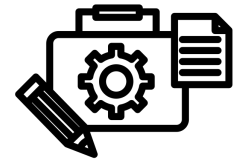
Instead, when reviewing your video footage, add the **time elapsed** since the start of the video recording to each of your notes. This will help us verify your notes, and help the consolidators extract relevant video clips and screenshots.

3. Analyze

Set aside at least an hour to meet as a group.

Designate one **Analyst** who will lead the meeting. The **Analyst's** responsibilities:

- Guide the conversation and ask all moderators which of their observations were relevant to each of your research questions in turn
- Compile issues and causes in a shared workspace (whiteboard, Google Doc, Slack channel) based on group discussion
- Lead discussion to compare the issues you found to what you expected after A2 and to prioritize issues based on their severity (impact and persistence)
- Compile an overall list of **5-10 numbered issues**, ordered from most to least severe. Indicate which were discovered via heuristic evaluation, research, or both, and determine the likely cause of each issue.
- Ask moderators to update their notes with the numbers of each relevant issue



4. Consolidate Evidence

Designate one or more **Consolidators**. The Consolidator(s)' responsibilities:

- Combine all observers' notes that are relevant to your selected issues into one **master data list** tagged by issue observed and participant
- Follow up on all reported instances in which each issue occurred, verify them, and create a list of timestamps pertaining to the issue
- Find an illustrative screenshot or video clip for each issue that shows it and could be shown in the final presentation
- Prepare the **master list** of issues for submission to Quercus.



The master list should:

- Describe each issue agreed upon in the analysis meeting
- Order issues from most to least severe
- Contain all notes from all moderators that are relevant to each issue, identifiable by participant number
- Include screenshots or video clips

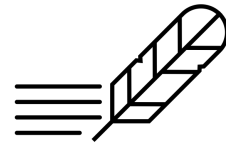
5. Present Evidence

Designate one or more **Presenters**. The Presenters' responsibilities:

- Create a slide deck summarizing your work on A3.

It should contain:

- **Introduction:** briefly describe the game and your work on A2
- **Research questions:** what did you want to investigate in A3 and why?
- **Research protocol:** what did you have participants do?
- **Research participants:** how many did you test with?
- **3-5 top issues:** For each top issue, explain:
 - What was the source of the issue? Was it heuristics, research, or both?
 - What was observed (include screenshot or play video and describe a typical instance of the issue occurring)
 - Why it may be problematic
 - What was the agreed-upon likely cause
 - How it impacted the player's experience
 - Your recommendations (if any)
- **Remaining issues** as a point-form list.
- Record a presentation of the deck as a video of no more than 8 minutes that includes all team members. The video will be played in your tutorial on Nov. 30 / Dec. 3, where you will receive feedback and recognition for your work.



Group and individual evaluation

This is a group assignment and all students will receive the same base grade for all deliverables, however an individual student's grade may differ from the group grade if:

1. Their individual observation notes do not meet the standard for the **10%** allotted to them.
2. Their **A2/A3 self-reflection is not sufficiently detailed or thoughtful**

Component	%
Individual notes follow note-taking guide, video submitted and anonymized	10
Individual self-reflection (see A2/A3 Self-reflection assignment on Q)	10
Research protocol and note-taking guide	20
Master data list of issues and notes	20
Presentation video: Issues prioritized, well described, and illustrated	20
Presentation video: Quality, clarity, formatting, and time limit respected	20

How to record video

Pre-recording your presentations will have the following benefits:

- You can ensure that time limits are rigidly followed
- Less nervousness or performance anxiety
- Easier on hybrid teams

To record a presentation, you may join a Zoom room together, and one of you can share your slide deck's screen with sound and optimized for video. Record locally on your computer and use YouTube Studio or any video editing suite to trim the video to its final length.

Your video must be legible and watchable (aim for 1080p and make sure all voices can be heard and understood), but you are **not** graded on production quality, transitions, or videography.

What to submit

Please submit all deliverables following the naming and file type convention below

Please omit square brackets ([]) from your filenames.

a3.[gametitlewithnospaces].research.protocol.PDF

- Research questions
- Sequence of research activities (observation / think-aloud / tasks / interview)
- Script with exact wording of what to say to participants
- Informed consent form template
- Note-taking template

a3.[gametitlewithnospaces].master.list.PDF

- All team members' notes pertaining to each of the issues you identified
- Timestamps of illustrative instances of each issue

a3.[gametitlewithnospaces].slides.PDF

- A PDF version of the presentation used in your video

A3.[gametitlewithnospaces].video.txt

- A publicly viewable hosted link to your presentation video (e.g., from YouTube or Microsoft Stream)

For each individual observer:

a3.[gametitlewithnospaces].[last name][first initial].notes.PDF

a3.[gametitlewithnospaces].[last name][first initial].video.txt