Final assignment

The course is 6 cr, which means that the time you should allocate for the final assignment is roughly 50-100 hours, depending on how much time you used to the other exercises, reading and watching the provided materials, playing the discussed games, or otherwise processing the course material outside the contact teaching hours. Please be mindful about your health and resources and plan your work so that you don't exceed that.

Deadline: 1st March 2025. Return your work as a pdf report via MyCourses.

There are multiple options for the assignment, explained below.

Option 1: Research a topic through making a game

Make a small game or game poem that explores a theme or themes discussed on the course, e.g., how to elicit a particular emotion.

For example, you could make and experiment on emergence inspired by the 50 Things That Made the Modern Economy podcast: https://www.bbc.co.uk/programmes/p04b1g3c/episodes/downloads

Alternatively, you could extend one of the exercises at the end of the "Psychology of games part 3: Emotion" lecture. The goal is to actually implement your game concept (or a new concept you come up with) and reflect on whether it actually manages to elicit the emotions you went for. For the best grade, you should playtest and collect feedback from your players

Option 2: Read a book and submit a learning diary

Read one of the books recommended in the intro lecture. Pick one that you haven't read already. I especially recommend Game Balance, as it is the most recent one. Submit your learning diary through MyCourses. Learning diary formats vary, but the minimum is that you should report what were the most important lessons for you in each chapter, and why (if applicable). This will be useful for me in developing the course further, as I will better understand where the students are coming from and what they find important.

Option 3: Computational analysis of an existing game

Analyze some game, e.g., using Python in the style of the course's Clash Royale notebook or by building a Machinations model of it (https://machinations.io/)

The grading will depend on how well you explain and visualize what you do and how challenging the task is. Don't assume that the person determining the grade knows the game you're analyzing. Because of this, it's good to include a link to an explanatory gameplay video.

Consider what kinds of data you could obtain and analyze. For example, this paper uses interesting data of puzzle game difficulty progression: https://cora.ucc.ie/bitstream/handle/10468/3461/Learning_Curves_AV.pdf. The authors basically logged the number of steps needed to solve each puzzle in four successful puzzle games, which allows plotting a rough estimate of how puzzle complexity evolves as the games progress.

An alternative is to scrape data from the game's wiki or some other source, using tools such as Beautiful Soup.

Option 4: Short literature survey of a research topic or question

Think of an interesting design or research question and conduct a brief literature survey about it, using peer-reviewed academic sources. Think of this as the equivalent of an Aalto SCI bachelor's thesis, but shorter (5-10 pages). Good examples of such theses (passed with distinction): https://aaltodoc.aalto.fi/handle/123456789/24416, https://aaltodoc.aalto.fi/handle/123456789/44587, https://aaltodoc.aalto.fi/handle/123456789/108067.

Ideally, this should be something that could ultimately become the "background and related work" chapter of your Master's thesis.

Grading is based on clarity of writing and argumentation. For grade 5, you should also be (semi-)systematic in your literature searches and explain your search process similar to the B.Sc. theses by Olli Pasanen and Emil Lindfors (above). Before doing the work, check how Lindfors explains and documents his process. Remember to include a table of search terms and results.