

Mid-Semester Design Project

You have been hired as a game design consultant to develop a conceptual design (in the industry, sometimes called a “treatment”) for an educational video game. However, since you are a university-trained expert in play and technology, you’ll want to justify your treatment using course readings.

Deliverables

For this project, please turn in:

1. a **treatment** (as close to 500 words as possible) describing your game concept in enough detail that your client will understand how the game you propose will work, and whether or not they should build it
2. a **research appendix** (250-750 words) that justifies WHY your design will be effective by citing concepts, evidence, findings, and quotations from at least **five** specific class readings **from Part I** of the syllabus (e.g., from five *different* S-S chapters)

Optionally, you *may* choose to turn in:

1. additional **multimedia** materials (e.g., a diagram, a chart) if they help explain your design or link your design choices to class readings

Grading Rubric

In addition to the **grading rubric for written work** (passed out earlier), this project will be graded on the following additional criteria:

- **Goals:** How well are the client’s **goals** met by your design?
- **Justification:** Are **specific** design choices **explicitly linked** to evidence, ideas, quotations, or concepts from the class? Is it clear you understand the course material used?
- **Influences and Attribution:** When concepts, ideas, and gameplay mechanics are taken from other games, are they relevant? Is the source identified (e.g., SimCity, ElectroCity)?

Your project will **not be penalized for**:

- aesthetics – e.g., how well you can draw
- real-world accuracy – for the educational components of your game, we expect you to represent the real world as accurately as you can *given the limited information you have been given*. (However, the game you propose should be convincing **as a game design**.)
- derivativeness – it is OK to take good ideas from existing games, or to combine existing games together to make a new game, as long as these decisions are well-justified.

Important Notes

- Clients have no input in grading.
- It is OK to re-use material from your reading diaries.
- Your designs will be public to facilitate sharing with peers and clients. (They can be shared pseudonymously, if you wish.)
- No collaboration with other students is permitted outside of class, except on the Q&A board. In-class collaboration is OK. Discussing ideas on the Q&A board is OK.
- If it helps, you can think of this design project as a take-home, open-book midterm.

Design Brief for a Proposed Educational Game about Power Networks

Florida Institute for Sustainable Energy

Background

In the good old days, power networks were operated centrally, power prices were set by governments, and there was little use of renewable energy sources like wind and solar. Therefore there was not much uncertainty and not much rapid variation in how the power network operated (unless there was a natural disaster or accident).

Today, governments have introduced a real-time market for power. Instead of building power plants to match a fairly well-known demand for power, providers are now private companies trying to maximize profit in a market system designed by government regulators. Power companies commit to provide power for the future in an auction system called “the day ahead market.” They also deliver power in real time as demand increases.

Goals

- Our required, **primary educational goal** is that we would like to teach college students about the dangerous potentials for failure and intentional manipulation in this kind of system, including ***profiteering*** and ***blackouts***.
- An **optional, secondary design goal** is that we would like to teach students about ***volatility*** – rapidly changing conditions – in the power network. Both power demand and power production are now more uncertain (e.g., due to the weather-dependence of renewable energy sources and the difficulty of storing energy).
- Our **primary design challenge** is that the power network is now extremely complex, but most people don’t experience this complexity as fun. We need a design that will make these topics fun and engaging, while still promoting learning about the power grid.

Technical Requirements and Audience

We require a free, single-player Web browser game aimed at college students from large Midwestern universities. Players may be assigned this game as part of a college course about energy.