

Project 3: Digital Prototype II: User Interface (Team Size: 6)

15 pts

Goals: Practice project management with a larger team and focus design iteration to maximize usability using user feedback through independent user testing.

Timeline:

- ❖ Mon, 9/29: *Workshop in class:* Brainstorming, Pitching. Team Formation.
- ❖ Mon, 10/6:
 - *Turn in:*
 - High Level Design Doc or “Back of Box” Copy (1 per team)
 - Product Backlog (1 per team)
 - *In-class:*
 - 2 minute presentation: the core of your game design idea
 - In-class testing of prototypes
- ❖ Weds, 10/8:
 - *Turn in:* Sprint Tasklist with time estimates (1 per team)
 - *In-class* playtest: Playable version of game required
- ❖ Weds, 10/15: Project Due
 - *Turn in:*
 - Digital Game Prototype Builds (1 set of builds per team)
 - Individual written postmortem (1 per person)
 - Changelog (1 per team)
 - Updated High Level Design Document: (1 per team)
 - Focus Test Reports (2 per team)
 - *In-class:* Postmortem Presentation (5 minutes per team)

Requirements:

- Meets themed constraint: “Trade-offs in Decision Making”
 - **Every** decision made by the player has a *positive* and *negative* outcome in their play state.
- Maximum play length: 5 minutes
- Single Player Game
- User Interface tested for legibility and usability. Significant attention played to entire user experience, as evidenced through iterative changes in design.
- Game **must** use & play audio for the player.
- Players can pick up & start playing the game with no external instructions.
- Game must be delivered as a browser game, running on Chrome. (Teams should host the game & provide a URL for project submissions.)
- Game meets the minimal play & legal requirements in Project 3, Appendix I.

Prototype Description

This project provides a test run of project management techniques with a slightly larger team. This project also requires independent focus testing by the group, and adds user interface requirements - an important part of making a digital game feel polished or complete. It may be used as a prototype for the Project 4 game. New challenges for for this project are the independent Focus Test and an emphasis on user experience.

Constraint: The game created for this project should focus on trade-offs in decision making: every major decision made by the player should have both *positive* and *negative* outcomes in their play state. Mechanics should focus on concepts such as opportunity cost, risk (and risk analysis), and side-effects (both immediate and further down a chain of decisions).

Independent Focus Test

Using either your Paper Prototype or a digital build of your game, conduct a focus test outside of class, gather data from your testers (at least 4), and use the data gathered from that test to improve your game. Record information on the Focus Test Summary for submission at end of project.

Teams are responsible for deciding what information they want, how to collect the data, running their test with at least 4 subjects, and recording the process and decisions with a Focus Test Summary.

User Experience Requirements

Through the design iteration process, focus on improving the overall user experience rather than game balance or mechanics. By this we mean the user interface (location and appearance of elements on screen), a player's ability to discern how the game works through playing the game, and feedback both given and perceived by the player when playing the game.

Note on polish expectations: The instructors are aware that artistic content creation skills were **not** a requirement for this class; we do not grade on the **quality** of content! In prototypes, we greatly prefer simple representative images and simple, clear sounds. Teams can choose to create assets, or use downloaded assets. There are websites with freely usable assets listed in 'Useful Software' handout and you may find other sites on the web.

Be certain that you only use **open source** assets or have obtained permission to use downloaded assets in your game, and that you follow all legal requirements when using assets in your game. ***Using assets that do not belong to you, which you do not have the right to use, is stealing and will not be tolerated in this class.***

This is not an art class, and we are accustomed to 'programmer art' - but even working with pre-made tilesets and poorly animated characters, a consistent user experience can be

achieved. For example, play “Sissy’s Magical Ponycorn Adventure”, a game with all assets created by a 5 year old. (<http://ponycorns.com/>)

Presentation/In Class Work Expectations:

- ❖ **10/6:** Very brief presentation of High Level Design Document/game vision and a current product backlog, showing how the backlog comes from the game vision and/or paper prototype. No visual aids other than the backlog/vision statement required! In-class playtest session for teams with a prototype (non-digital or digital).
- ❖ **10/8:** Must have a playable build and testing goal/plan ready for the test session.
- ❖ **10/15:** 5 minute Postmortem Presentation to the class & teaching staff at the beginning of class. Presentation should reflect on what went right, what went wrong, what the group learned while working on the project, and what they will do differently to improve their process on the next project.

Deliverables

10/6, 10/15 High Level Design Document (HLDD): Only turn in an updated version on 10/15 if any major changes in the design occur.

10/6 Product Backlog: Presented in class and turned in, in .pdf or spreadsheet format.

10/8 Sprint Tasklist: Current as of build tested in class. Turned in, in .pdf or spreadsheet format.

10/15 Individual Postmortem: Each student is also responsible for writing a *short, single page, single spaced* individual postmortem paper. Papers should be turned in, in **.pdf format**, by the start of class on 10/15. The postmortem paper **must** include the following:

- ❖ A *short* description of the team’s overall design goals with additional detail on the team’s design process.
- ❖ Personal reflection on the results of the project.
 - Call out both *good* and *bad* choices made by the team.
 - Explain *why* those choices were made.
 - Describe both *what worked well* and *what didn’t work*.
- ❖ A summary of changes the individual or team could make in the future to improve overall team processes and deliverables.

Postmortem papers will be graded on content and grammar. A good postmortem contains all of the abovementioned content in readable English prose. An excellent postmortem focuses on reflection and on possible future changes instead of simply describing the work.

10/15 Changelog: To give the instructors some insight into your design process, we require the team to create & maintain a written changelog. At the end of each design session (whether in class or not), the team should create a short description of the key changes in their prototype’s

design this session, and add it to the changelog. The changelog should be turned in, in **.pdf format**; the team need only submit one copy for the whole group.

10/15 2 Focus Test Reports: Teams will complete an initial Focus Test Report during the in-class playtest on 10/8. Teams are required to conduct a second, external playtest outside of class, described within a second Focus Test Report. These documents should be turned in in **.pdf format**. Any additional testing sessions should have resultant Focus Test Reports completed and turned in as well. The template can be downloaded as an .rtf file.

10/15 Prototypes: Digital game prototypes must be hosted on an external server and accessible via a web link.

The following builds **must** be accessible and playable within the latest Chrome browser (with assistance from plug-ins where applicable):

- ❖ Final build
- ❖ Build used during external playtest (pictures of paper prototype or link to playable digital prototype)
- ❖ Build used during in-class testing on 10/8
- ❖ Any additional builds used for testing and referred to in focus test reports, clearly labeled by date of build creation.

Appendix 1: Playable Prototype Requirements

For Final Delivery, 10/15:

Basic UI & Legal Requirements:

- Displays the name of the game on the title screen.
- Credits are present, listing the names of everyone who worked on the game. *(If your team accepts work from outside your team, they should be credited. Credits may be on the title screen.)*
- Displays all required legal screens, licenses, and copyright information based on any used third-party code or assets, middleware, or game engine requirements. *(if you are using borrowed assets that require an attribution - ie, 'feel free to use this artwork but give me a credit in your game' - those are covered under this requirement.)*

Playability:

- User is able to start a new game.
- User is able to quit a game or close browser game window without crashing.
- Clearly indicates to a user when a game is in progress.
- Allows the user to play all the way through the game.
- Clearly indicates to the user when a game is over.
- Clearly indicates the overall result of a game to the user: won/lost/other state
- If game can be paused, clearly indicates when game is paused.
- If game can be paused, it is clear how to toggle between paused and unpaused modes.
- Any game-breaking defect is documented for users.
- Runs for at least one playthrough without crashing.
- Any serious defects are documented as a 'readme' when submitted, so the users can avoid them.
- All features required for gameplay are in and working.

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