

# CSAT 2309: INTRO TO GAME DESIGN

6-8.50pm, Monday | Aug – Dec, 2021 | Virtual Meeting, SRSU

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Virtual office hours: TR, 9-9.25am and by appointment

## TEAMS Meeting Link

A TEAMS meeting that meets 6-8.50pm, Mondays, can be found here: <https://tinyurl.com/j8sk4daw>

## Course Introduction

In this class you will learn how to translate and refine ideas into playable games. You will study the history of games and play, keep a journal of games played, quickly create and test your game ideas using non-digital means, learn how to analyze games, read important game studies texts, and build a detailed design document for a digital game.

## Learning Objectives

In this course, you will:

- Become familiar with the history of digital games
- Study the mechanics of what makes a game engaging
- Brainstorm concepts for games, quickly build them, and tweak them until successful
- Learn how to build paper prototypes of your game ideas
- Understand how to create a Design Document, which can be used to help create and guide a digital game.

## Grading and Evaluation

You will be graded on exercises, attendance and participation in discussions and critiques, homework projects, and a final project. Details on how a project is graded are included in each project description. No extra-credit projects will be offered, so it is in your interest to submit work by the deadline.

Your final grade will consist of:

- Game Journal – 15%
- Game Designer Essay and Presentation – 15%
- Projects – 35%
  - Three Level Designs
  - Five board games
  - Brainstorming
- Attendance and Participation – 15%
- Final Project – 20%

### *Attendance and Participation – 15%*

Being present in class, answering questions, and discussing assigned articles, are all an important part of understanding the theory of game design. Testing out ideas and theories with classmates and the professor is how you become a better game designer.

Introduction to Game Design is not a programming or art course; instead, it's an ideas course – developing them and constantly improving them through iteration.

### *Game Journal – 15%*

In class we do not have time to touch much gaming history, so this is a way for you to look into gaming's past. Achieving 100% is not difficult – play the games listed, answer the questions, and turn the document in on time.

### *Class exercises – 35%*

These exercises are where you apply your thoughts, conversations, and discussions about gaming. Each exercise focuses on a particular element of gaming so that you can apply the theoretical to a physical paper prototype. Each exercise will be graded as follows:

- 33% - *Did the project meet the objectives? For instance, if the exercise was one on strategy, were any elements of strategy present in the game?*
- 33% - *How imaginative was the game? Did the student design an interesting solution to the problem?*
- 34% - *How much effort was put into the exercise?*

#### *Final Project – 20%*

This will be a detailed design document that you would theoretically use to help build your game.

Work submitted **no later** than the beginning of class, the day of the deadline, will be graded. **Any work submitted *one minute past the beginning of class will be awarded a zero. There are no exceptions to this rule.***

### **Final Examinations**

You must turn up to the final examination. If you do not, your overall class grade will drop an entire letter.

### **Materials and Text**

- 4GB (at least) jump/flash drive
- Prototyping materials
  - Index cards, scissors, Elmer's glue (or equivalent), masking tape, sticky tape, pencils, colored pencils, colored highlighters, at least 4 sheets of poster board, and more to be announced.

No textbook is required for this course, but a jump-drive is essential for some of your projects your work. You are expected to back up your projects to another location, such as at a free service like [www.dropbox.com](http://www.dropbox.com) or [www.google.com/drive](http://www.google.com/drive). Not submitting a project because you lost your jump-drive, or some other technical difficulty, will not be accepted as an excuse and will earn you a zero for that project.

Each student is given space to store their work on the Sul Ross server. However, it is important you also save your work to another location too. Flash drives can be bought online or at the Sul Ross library.

The following texts are not required for class but are **highly recommended** if you choose to pursue game design.

- **Rules of Play: Game Design Fundamentals** - Katie Salen and Eric Zimmerman  
ISBN-10: 0262240459
- **The Art of Game Design: A book of lenses** - Jesse Schell  
ISBN-10: 0123694965
- **Game Design Workshop, Second Edition: A Playcentric Approach to Creating Innovative Games** - Tracy Fullerton  
ISBN-10: 0240809742
- **A Theory of Fun** – Ralph Koster  
ISBN-10: 1449363210
- **Edge Magazine** – Monthly periodical that covers modern gaming, available at the Sul Ross library
- **RetroGamer Magazine** – Monthly periodical exploring gaming history, available at the SRSU library
- [www.gamasutra.com](http://www.gamasutra.com) – One of the best websites for keeping up with the gaming industry
- [www.Polygon.com](http://www.Polygon.com) – Excellent reviews and features

### **Tobacco Products**

Tobacco products of any kind and e-cigarettes are not permitted in the classroom.

### **Email**

You are expected to check your email account EVERY day. This is the account that is registered at Blackboard, and is usually your Sul Ross email account.

## Software Availability

Besides access to the software in FAB 207, you can find Photoshop and Illustrator in BAB 302-303, and the computer lab in the ACR building. The second floor of the SRSU library has copies of Photoshop too. Microsoft Word is available on almost every computer on campus.

Provided you have your own computer, a fully working 7-day trial version of Photoshop and Illustrator can be downloaded from Adobe. Files created on the Mac version of Photoshop will work on a PC.

## Rules and expectations

Attendance is **compulsory**. If you must miss a class for a school-related activity, the absence must be discussed (and arrangements made regarding coursework) **prior to the absence**. If you must miss a class for an emergency or illness, please contact me **by email or phone as soon as possible**. Six (6) absences result in you being dropped from the course with a grade of "F" as per Sul Ross State University policy. Five (5) unexcused absences will result in a zero for your attendance and participation grade. Arriving to class **on time** is also essential – **arriving late more than two times will be counted as one absence**. **Lateness is defined as 15-minutes after the start of class**. **Leaving before class ends will result in you being marked absent for that day**.

**Please note that an absence is 50-minutes, not one class period**. Below is a guide to how much each absence impacts your attendance and participation grade.

- |                                 |      |                                |       |
|---------------------------------|------|--------------------------------|-------|
| • One (1) unexcused absence:    | -20% | • Four (4) unexcused absences: | -80%  |
| • Two (2) unexcused absences:   | -40% | • Five (5) unexcused absences: | -100% |
| • Three (3) unexcused absences: | -60% | • Six (6) unexcused absences:  | FAIL  |

No cell phone usage. No social-networking websites. No instant-messaging. No checking personal emails. Headphones and earbuds are allowable **ONLY** when you are working, but not when the professor or a fellow student is speaking.

**Doing any of these, or anything I consider disruptive to the class, will drastically drop your attendance and participation grade. You may be also asked to leave the class and will be marked absent for that day.**

**Late work** will not be accepted.

**Plagiarizing, cheating, or any other dishonest behavior in the classroom will not be tolerated**. Rules and regulations regarding plagiarism, dishonesty, and other issues concerning classroom participation can be found in University Rules and Regulations and Student Handbook. This course will abide by these established policies. A student found to be engaging in these activities will be penalized to the full extent of Sul Ross State University policy.

## ADA Needs

It is Sul Ross State University policy to provide reasonable accommodations to students with disabilities. If a student would like to request such accommodations because of a physical, mental, or learning disability, please contact the ADA Coordinator in the Ferguson Hall, room 112 or call (432) 837-8691. Please relate all requests for special accommodations to the instructor by the third-class period.

## Marketable Skills

1. Solving problems through critical thinking.
2. Creating ideas with independence of thought.
3. Communicating professionally through written and spoken presentation.

## COURSE SCHEDULE

*Please note that this syllabus is subject to change*

**N.B. As this is primarily an ideas course, clichéd themes such as post-apocalyptic and zombies will not be allowed in your games, unless you can come up with a unique spin on it.**

DATE	IN CLASS	PRESENTATIONS
Aug 23 (M)	<ul style="list-style-type: none"> <li>• Syllabus and class introduction</li> <li>• Game Journal introduction</li> <li>• Game Designer essay and presentation information</li> <li>• Prepare game-making materials for next class</li> </ul> <p>READING:</p> <p><del>Gaming's toxic men, explained</del>  <a href="https://www.polygon.com/2018/7/25/17593516/video-game-culture-toxic-men-explained">https://www.polygon.com/2018/7/25/17593516/video-game-culture-toxic-men-explained</a></p> <p>The video games of Ecuadorean fishing village Santa Marianita  <a href="https://www.polygon.com/2018/7/10/17542816/ecuadorean-fishing-village-santa-marianita-video-games">https://www.polygon.com/2018/7/10/17542816/ecuadorean-fishing-village-santa-marianita-video-games</a></p> <p>THE CREATION OF MISSILE COMMAND AND THE HAUNTING OF ITS CREATOR, DAVE THEURER  <a href="https://www.polygon.com/features/2013/8/15/4528228/missile-command-dave-theurer">https://www.polygon.com/features/2013/8/15/4528228/missile-command-dave-theurer</a> (don't use Microsoft Edge – try Firefox or Chrome)</p>	01 – What is a game?
Aug 30 (M)	<p>Article(s) discussion</p> <p>GAME 01 – Digital to paper game, in a team of two</p>	02 – Digital Games 03 – Conflict
Sept 6 (M)	<b>---Labor Day---</b>	
Sept 13 (M)	<p>Play digital to paper game</p> <p>GAME 02 – Space Pilot Rescue Game</p>	04 – Choices 05 – Interest & Replayability
Sept 20 (M)	<p>Play Space pilot rescue game</p> <p>GAME 03 – Reward and Punishment game</p>	06 – Reward & punishment
Sept 27 (M)	<p>Play Reward and Punishment game</p> <p>Essays and presentations due next class!</p>	07 – Balance
Oct 4 (M)	<p><b>DUE TODAY: Essays and Presentation</b></p> <p>GAME 04 – Balance Game</p>	
Oct 11 (M)	Play Balance Game	08 – Level Design

	Create three level designs	Dan Cox on Level Design
Oct 18 (M)	<b>DUE TODAY – Three level designs</b>  GAME 05: Strategy and Luck  Game journals due next class!	09 – Strategy
Oct 25 (M)	Play Strategy and Luck game  <b>DUE TODAY: Game Journals</b>  Brainstorming class	10 - Art for Games
Nov 1 (M)	Present your game ideas to class  Begin working with your partner on your Design Document	
Nov 8 (M)	Final projects  N.B. – Nov 12 is the last day to withdraw from the 16-week course/term with a grade of 'W'. Drops must be processed and in the university registrar's office by 4 p.m.	
Nov 15 (M)	Final projects	
Nov 22 (M)	Final projects	
	<b>Thanksgiving Break, Nov. 24-26</b>	
Nov 29 (M)	Final projects	
Dec 3 (Fri) 6-8pm	FINAL EXAM For the exam you will show your group project to the class. Email design document to professor by 9pm, the day before.	

# PROJECT DETAILS

## Game Journal

Start this project immediately – it will be time-consuming (but hopefully enjoyable). The format MUST be in Microsoft Word format and saved as either a .DOC or .DOCX file. Some of these games may be available to play here: [https://archive.org/details/softwarelibrary\\_msdos\\_games](https://archive.org/details/softwarelibrary_msdos_games). Be prepared to explore the internet to find copies of these games, and remember to check at the SRSU library. Visit the Gaming Analysis Lab in the SRSU library.

### Project Details

1. On a PC, Mac, or mobile device, play a free-to-play game (for example, **Angry Birds**, **Clash of Clans**, **Candy Crush Candy Saga**, **Bubble Witch**, **Crossy Road**, **Pac-man 256**, etc.)
  - a. Describe the mechanics of your chosen game. What works? What doesn't work? What about the free-to-play model? Is the pay model successful?
2. Play **Tetris** - <https://tetris.com/> and the classic version of **Bejeweled** - <http://zone.msn.com/gameplayer/gameplayer.aspx?game=bejeweled3>
  - a. What are the differences between the two games? Which did you prefer? Why?
3. Play **Canabalt** - <http://adamatomic.com/canabalt/> and then **DinoRun** – <http://www.miniclip.com/games/dino-run/en/>
  - a. What are the differences between the two games? Which did you prefer? Why?
4. Play **Robotron 2084** and **Smash TV** (available in the library on Xbox 360 and PS3 on *Midway Arcade Origins*)
  - a. What is the difference between the two games? Which is the more successful game? Why?
5. Play **Defender** (available in the library on Xbox 360 and PS3 on *Midway Arcade Origins*)
  - a. Is this game difficult or easy? Are the graphics suitable for the game? What could be improved?
6. Play **Pac-man** or **Ms. Pac-man**. Then on PC or mobile play **Forget-me-not** (<http://www.newgrounds.com/portal/view/595272>).
  - a. What are the differences? Which is better? Why?
7. Play some of **Zork** or the **Hitch-Hiker's Guide to the Galaxy** –  
ZORK: <http://www.web-adventures.org/cgi-bin/webfrotz?s=ZorkDungeon>  
HHGH: <http://www.bbc.co.uk/programmes/articles/1g84m0sXpnNCv84GpN2PLZG/the-hitchhikers-guide-to-the-galaxy-game-30th-anniversary-edition>
  - a. Now try Peasant's Quest (a parody of the King's Quest series) - <http://www.homestarrunner.com/disk4of12.html>
  - b. Which did you prefer? Why? How difficult were both games? Did the graphics add anything to the experience?
8. Play the following classic Atari arcade games (available online here: <http://my.ign.com/atari>)
  - a. Asteroids
  - b. Battlezone
  - c. Centipede
  - d. Missile Command
  - e. Tempest

Explain which was your favorite and least favorite, and explain why for both choices.
9. Play either Sonic the Hedgehog 1, 2, or 3 (available at the library for XBOX 360 or PS3).
  - a. This game was Sega's rival to the Super Mario Bros. franchise. Do you feel it was better? Explain why.
10. Play three games of your own choosing and critique each of them

### Grading

You will be graded from 0-100% on this project. Each game you miss, or not following the instructions for each individual game, will impact your grade.

Submit the work no later than the start of class, the day of the deadline.

## Game Developer Essay

Choose a game developer and write an essay on their games, career, and design philosophy. I have a list of game developers that you may choose from. If you have someone on the list you would like to study, please discuss this with me.

### Project Details

- Essay length – 3-4 pages, double-spaced, 12pt Times New Roman, 1" margins
- Areas to cover in your essay:
  - How did this person enter the game design industry?
  - What games were they involved with? List a **minimum of three games**, though you can (and should) study more.
  - For each game...
    - Why was this game important?
    - Why was the game created? Was it a reaction to a previously existing game? An experiment in mechanics? Something else?
    - What was unique about it?
    - What was successful and unsuccessful about the game?
    - What influences has the game had on games and culture since it was released?
  - Why is this designer important to game design?
  - What is their design philosophy?
  - How were they successful or unsuccessful as game designers?
  - What did you learn from studying this designer that you could apply in your games or career?
- Cite your sources. I HIGHLY RECOMMEND interlibrary loan books that have interviews with game designers. WIKIPEDIA is not a valid source (it is a fine place to begin your research, but not to cite from).

### Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Grammar and spelling – 15%
- Use of at least one physical book – 5%
- Research, and intelligence of arguments – 40%
- Covering all of the points above – 40%

Submit the essay as a word file, no later than the start of class, the day of the deadline. Use this file format – LASTNAME-FIRSTNAME-essay.doc

## Game Designer Presentation

Take the research from your essay and turn it into a PowerPoint presentation that you will show and discuss in class.

### Project Details

- Discuss at least three games that were created by the game developer you studied.
- Each game must have a minimum of three slides.
- Do not read paragraphs of text directly from your slides – instead, use the visuals and your notes to give an oral presentation to your audience.
- Your presentation must have a minimum of ten slides – slide one lists your choice of designer, plus your name, and the remaining nine are devoted to your research.

## Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Oral quality of your presentation – 50%
- Visual quality of your presentation – 50%

Be ready to present during the dates listed in the syllabus.

## Game #01 – Digital to Paper Game

Strip away the graphics, sound, story, controllers, and the computer from a game. All you are left with is the game idea. This exercise allows you to see the pure gameplay mechanics without any distractions.

There are a number of ways to turn a digital game into a non-digital game.

- **Literal** – Mario Kart could be turned into a race-to-the-end board game. Doom could be turned into an RPG.
- **Thematic** – These conversions take either the story line or theme and convert that into a non-digital game. For example, the quest in Super Mario Bros. to find the princess could be turned into a role-playing game.
- **Mechanic** – This way of working takes a common mechanic and uses that for the basis for a non-digital game.

## Project Details

- In class we will make a list of games and divide into teams of 2-4 to tackle some of them. Each team will take on one game and cannot make the same game as another team.
- What is the basis of your game? Is it a first-person-shooter like Half-life 2? Is it a platform game? A racer? A physics game? Can any of these mechanics be made non-digital?
- What elements can you take from the digital version of your game? Will they work in the non-digital version?
- Create a rough prototype using whatever game bits (dice, cards, counters, etc.), paper, and other props you have on hand. Play the game a few times and note what does and doesn't work. Make necessary changes, play again, make changes, and repeat.

## Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Does your game capture the idea of the original? – 30%
- Is it interesting to play? – 40%
- Creativity and effort – 30%

Submit the work no later than the start of class, the day of the deadline.

## Game #02 – Space Pilot Rescue Game

In this game you are to find a downed space pilot and bring him/her back to your spaceship. The game must contain an aggressive space monster for which you will design the artificial intelligence (how it thinks and reacts to your presence). Below are questions that might help you shape your game but you do not have to adhere to any of them.

## Movement



- How big is the play area?
- How do you move? How does the monster move?
- Do you both move linearly?
- Can the monster teleport or jump? Can you?
- What speed do you move? Do you move slower when you have the downed space pilot?
- What is the terrain like? Can you move equally fast everywhere? Are there parts of the land that will slow you down?

### Attacking

- How does the monster attack? Does it only attack according to line-of-sight?
- Does the monster have any special moves? Do you?
- How can you kill, disable, or slow down the monster?
- Does it have a weak spot?
- What weapons do you have? Do you have any weapons? If not, can items be found in the environment?

### Artificial Intelligence

- Is the monster smart? Can it be easily fooled?
- Can you hide from it?
- What does the monster react to? Sight? Sound? Heat? The trail you leave when you move?

### Time

- Is there a time limit? If not, how do you prevent the game from lasting for hours? How do you ensure the game isn't too short?
- Can you add time? Will there be a time penalty?
- What other ways can you add time? Oxygen? The health of the downed pilot? Night into day? Radiation exposure? An acidic atmosphere? The mothership leaving you both stranded?

### Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Does the enemy have an interesting set of rules? – 30%
- Is the pacing of the game good? Or is it too long/short. – 20%
- Interesting movement rules for the player and enemy? – 20%
- Creativity and effort – 30%

Submit the work no later than the start of class, the day of the deadline.

## Game #03 – Reward and Punishment game

Create a resource card game that uses risk vs reward, and possibly some element of punishment.

### Project Details

- Firstly, think of a theme. What's an interesting resource to acquire? Squirrels getting acorns? Viruses capturing cells? Children gathering toys?
- Once you have your theme, decide on the types of resources, and how you gain and lose them. Acquisition should occur in small amounts, with the possibility of bigger gains, but with a bigger penalty.
- Punishment can be employed but test this thoroughly – you do not want a situation where the game is over in a matter of seconds, but you also don't want it to drag on tediously either.

- While cards must be used in this game (either playing cards or, ideally, ones you create make yourself), there is no reason why you cannot employ other board mechanics. Perhaps your cards are used to build something. Or they relate to a gameplay board?

### Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Interesting theme – 30%
- Good use of rewards – 35%
- Well balanced game – 35%

Submit the work no later than the start of class, the day of the deadline.

## Game #04 – Balance game

Begin with an unbalanced game, and balance it to make it fun.

### Project Details

- Set up a 10x10 square grid on poster board.
- Add a player who can initially move one square at a time. Add four enemies who can move two squares at a time. Enemies just need to touch the player once to kill the player.
- Objective is for player to reach the opposite end of the board. Test the game and talk with your partner about how fun it is.
- Now comes the redesign – as you can see, this is an unbalanced game. How can you make it more interesting, whilst still having the same objective of the player reaching the end of the board, and the enemies tracking the player down? Consider the following elements”
  - Some form of stealth? Hiding in the shadows?
  - Impassible walls? Breakable with bombs/tools/chemicals/abilities?
  - A life system? A weapons system?
  - Traps?
  - Teleports?
  - Player clones?
  - Etc...
- **Come up with an interesting theme**
- Test the game to make it work well. You don’t want it too easy or too difficult.

### Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Interesting theme – 20%
- Balanced well – 50%
- Creativity and effort – 30%

Submit the work no later than the start of class, the day of the deadline.

## 05) Brainstorming

Come up with a game idea for your final game design document.

## Project Details

- This **must** be an interesting or unusual idea. If you are going to use a common trope, such as zombies, you **MUST** find a way to make it fresh.
- Find a quiet spot in the building with your team to work. Hang poster board onto the wall and begin thinking of ideas. Number your ideas and think of as many as possible. **Twenty** ideas is the bare minimum for this exercise. You have until the end of class.
- For the following class, you will present the best three via a PowerPoint presentation. If you wish to add simple graphics, color, etc., then please do so. At the very least, you should have minimal text which you can then expand on with your oral presentation.

## Some Brainstorming Techniques

### *State a Challenge*

One way to come up with ideas is to limit yourself. For instance, you could try working with the following constraints:

- 1) Design a game that uses only one button
- 2) Design a game where players must not kill
- 3) Design a game where two players must collaborate
- 4) Design a game where color is an integral gameplay component

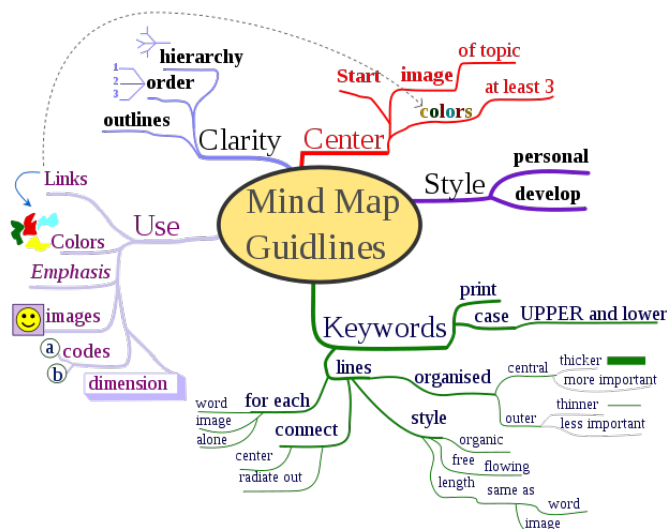
### *Do not criticize or be negative*

When brainstorming, it's vital that everyone is supportive of each other. An idea that you think sounds silly might actually suggest interesting ideas. Be positive otherwise you may put off the other members in your team. Write down everything and edit later.

### *Wordplay*

If you're having no luck with ideas then try this method. Everyone in the team writes down fifteen random words on separate pieces of paper. From each person pull out random combinations and see if that leads anywhere.

### *Mind Maps*



Source: <http://en.wikipedia.org/wiki/File:MindMapGuidelines.svg>

## Grading

This project will be graded pass/fail. To achieve 100%, please do the following:

- With your class partner, come up with twenty game ideas
- Show your three best ideas as a PowerPoint (please email this to me)
- Explain your three ideas orally, and be prepared to answer questions about your ideas.

Submit the work no later than the start of class, the day of the deadline.

## Final Project – Design Document - Courtesy Eric Zimmerman – www.ericzimmerman.com

### CONCEPT TREATMENT – 40%

Purpose: to “sell” the concept as interesting and describe it in a general way

#### THE BASICS: minimum of ½ to 1 page

*WHAT IS IT AND WHY IS IT INTERESTING?*

1. What is it (quick summary)?
2. Why it is distinctive or innovative?
3. Platform? Mobile, PC, board game, etc.?
4. Audience (Who is it and why will they like it)?
5. Revenue model? Pay once? Free to play? Subscription? Free to download, pay to unlock?

#### DESIGN OVERVIEW: minimum of 1 page

*WHAT IS THE PLAYER EXPERIENCE & CREATIVE VISION FOR THE GAME?*

1. What is the core mechanic of the game? Are there any similar games?
2. What is the overall story or narrative content of the game?
3. What are the audio and visual aesthetics of the game? Show examples.
4. How is the overall arc of the game experience constructed?
5. Are there different modes or levels? Explain.

#### DESIGN DETAILS: minimum of 1-2 pages

*HOW DOES YOUR VISION GET REALIZED IN THE DETAILS OF THE GAME?*

1. What is the moment-to-moment gameplay, including controls?
2. What are the economies, resources, etc. of the game?
3. What is the game interface? Show the screens with planned UI (e.g. score, energy, etc. on the main play screens, plus, option levels, start screens, etc.). **Wireframe these screens and don't worry about showing artwork.**
4. List out levels, features, items, enemies, characters, etc.
5. Can you describe one level or one moment in detail?

#### VISUAL REFERENCES/INSPIRATION: minimum of 1-2 pages

*WHAT DOES IT LOOK AND FEEL LIKE? SHOW EXAMPLES YOU WANT TO DRAW INSPIRATION FROM.*

1. Visual references can include references to:
  - characters
  - world and setting
  - interface and layout
  - overall mood and art direction
2. Remember to look beyond just games for your inspiration
3. Small amount of text is OK but be clear and explain WHY references are there

## DIGITAL PROTOTYPE SPEC: diagrams + variable list + asset lists – 40%

Purpose: a plan for creation of the initial skeletal prototype

*WHAT IS THE MINIMUM VIABLE VERSION OF THE GAME?*

1. Describe the main features that the prototype will test – be strategic! For example, the size of the various levels, the destructive power of weapons, the range of vehicles, etc.
2. List the prototype controls
3. **Include at least one schematic wireframe or flowchart. E.g. Game Start > Character Movement > Enemy Movement > Power ups > Hazards (list these all as bullet points) e.g.**
  - a. **CHARACTER MOVEMENT** – Player can move left, right, and climb up and down ladders.  
In later levels she will be able to dig and fly for 4 seconds at a time
  - b. **ENEMY MOVEMENT** – First level includes \_\_ which can \_\_\_\_ as well as \_\_ which can \_\_\_\_
  - c. **Level one has the following power ups which give the player these abilities**
  - d. **HAZARDS** – List of hazards on level one
4. List the variables you would want exposed and tweakable in the prototype (e.g. jumping range, character speed, enemy speed, etc.)
5. List all of the visual and audio assets required for the prototype (list level items, backgrounds, and characters)

## SCREENSHOTS – 20%

Using digital software or traditional means, mock up the following screenshots:

1. Title Screen
2. Options Screen
3. Main Gameplay area, level #1
4. Main Gameplay area, level #2

### Grading

You will be graded from 0-100% on this project. Treat this project as seriously as you can – if you are seeking funding to make a game in real life, this is the kind of material you present to a funder. Grade breakdown:

- **CONCEPT TREATMENT** – 40%
  - Answer all the questions that are listed in sufficient detail
- **DIGITAL PROTOTYPE SPEC: diagrams + variable list + asset lists** – 40%
  - Answer all the questions that are listed in sufficient detail
- **SCREENSHOTS** – 20%
  - Create sufficiently detailed, high-quality screens

Submit the work no later than the start of class, the day of the deadline.

## Level Designs

Working with another classmate, design a level for the following three types of game – racing, platform, and stealth.

### Project Details

For each of these, you first want to come up with a theme. This will determine how the player moves, and what obstacles they face.

- **RACING** – Typically, you race around a track a number of times. The level of complexity is up to you. What will slow you down? What will speed you up? What hazards exist? Remember that you do not have to use cars. Consider animals, insects, bacteria or viruses, robots, rocks moving over millennia, etc.
- **PLATFORM** – Again, theme will determine what you do and what hazards you face. Collecting jewels? Just escaping? Destroying everything in sight without covering up the exit? Something more creative and less destructive?

- **STEALTH** – A little more restrictive – stay in the shadows, avoid lights, and reach an exit and possibly disable guards. Your theme does not have to be humans. Robots, perhaps? Something more abstract?

For each of these levels, discuss ideas with your classmate. You must create rough sketches in paper and then finalize your work digitally.

## Grading

You will be graded from 0-100% on this project. Each map will be awarded 33 1/3% -

- RACING – Does the level feel challenging enough, yet with areas of track where you can build up speed?
- PLATFORM – Is it interesting? Any unusual mechanics? Is the level cleverly and creatively designed?
- STEALTH – How well do you apply stealth? Are there any interesting features to your level? Have you applied creative solutions to this design problem?

Submit the work no later than the start of class, the day of the deadline.

## Game #05 – Strategy and Luck

Create a game based on a dangerous occupation. Your game must include elements of strategy and luck. Below are some dangerous occupations to consider:

- Firefighter
- Military
- Bomb Disposal
- Chemical clean up
- Policeman
- Nightclub bouncer
- Working with dangerous animals
- Transporting valuables
- Medic in a warzone
- Deep-sea diver
- Explosives expert
- Thief
- Warlord
- Head of a criminal organization
- Hostage negotiator
- Jungle Explorer
- Mine cleanup
- Pirate

## Project Details

How will you add luck? What elements of chance will make the game interesting, without making it unfair or boring, due to its unpredictability?

What about strategy? How will you employ tactics? What will your game do to make each player consider the future impact of their current moves? How will you make the player figure out what the other player will do?

Don't automatically think you have to make a board game. Cards are also one other way of playing your game. Think back to the board game week and borrow some of those mechanics if you'd like.

## Grading

You will be graded from 0-100% on this project. Grade breakdown:

- Does the game convey the theme you have chosen? 30%
- Have printed/emailed rules been provided? 10%
- Does the game use luck well? 30%
- Does the game make good use of strategy? 30%

Submit the work no later than the start of class, the day of the deadline.