

Escape Room Agenda

Software Requirements Specification



CSCE 247: Software Engineering

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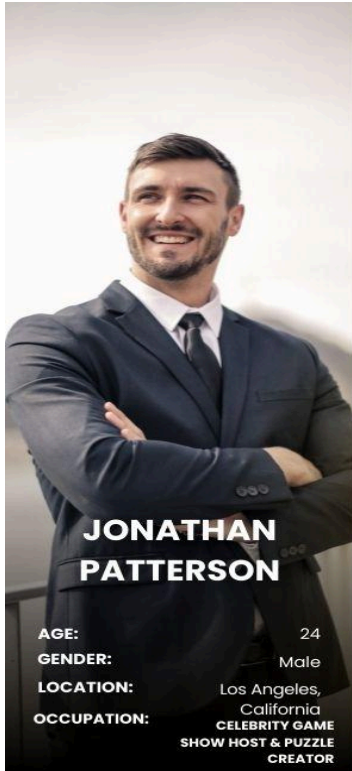
1.INTRODUCTION:

Purpose

Escape Rooms have gained a lot of popularity over the past decade. Most people enjoy the thrill of solving puzzles, and unlocking secrets. However, a majority of escape rooms take place in a physical space which can be expensive or inaccessible for a lot of people. Our project is a virtual escape room that offers the same thrill as a physical escape room but in a digital environment. Our goal is to design a virtual escape room that is fun, engaging, and user friendly. The business problem we are solving is that traditional escape rooms are limited by location, capacity, and accessibility. Our escape room provides a more flexible alternative that can be enjoyed by a wide variety of groups, whether for education or entertainment.

2.Stakeholders

- Puzzle enjoyers
- Consumers
- We as the developers
- The employer (the one who contracted us to make the website)
- Whatever website is hosting the escape room





JONATHAN PATTERSON

AGE: 24
GENDER: Male
LOCATION: Los Angeles, California
OCCUPATION: CELEBRITY GAME SHOW HOST & PUZZLE CREATOR

ABOUT

JONATHAN THRIVES IN FRONT OF A CROWD. HIS WITTY REMARKS AND PLAYFUL ENERGY KEEP FANS GLUED TO THEIR SCREENS. OBSESSED WITH RIDDLES, CODES, AND MYSTERY CHALLENGES, HE'S EARNED THE NICKNAME "THE MASTER OF MAZES."

PERSONALITY

Analytical 
 Problem-Solving 
 Public Speaking 
 Adaptable 


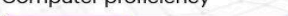
GOALS

- Expend his show internationally
- Create a legacy
- Change the Game show Format.


FRUSTRATIONS

- Everything's Been Done Before
- Fans Who Expect the Impossible
- Technology Overload

SKILLS

Communication 
 Leadership experience 
 Computer proficiency 


FAVORITE BRANDS

LIAM EAMON

PROFILE

Gender : Male
 Age : 28
 Education : Bachelors in data sciences
 Occupation : Data analyst
 Address : 4205 Jett Lane, Inglewood, CA, 90301



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"Data isn't just about numbers; it's about finding patterns that can make a real difference. I thrive on the challenge of turning raw data into actionable insights, and in a fast-paced world like this, being able to anticipate what's coming next is key."

BIOGRAPHY

"A 28-year-old data analyst from California, he's passionate about turning complex data into actionable insights. With a keen eye for detail and a love for problem-solving, he thrives on finding patterns that drive smarter decisions. Outside of work, he enjoys exploring the blend of technology and creativity."

MOTIVATIONS

- Uncovering hidden insights
- Making an Impact
- Continuous Learning
- Creativity and Innovation
- Problem-Solving
- Personal Growth


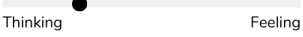


GOALS

- Achieve work life balance
- Host a Game night with friends
- Improve cooking skills
- Travel to new places




FRUSTRATIONS

- Lack of time for personal hobbies
- Tired of the unpredictability of board games
- Disorganization in personal life
- Difficulty disconnecting from technology



PERSONALITY

Introvert  Extrovert
 Thinking  Feeling
 Judging  Perceiving
 Sensing  Intuition

TECHNOLOGY

Software 
 Social Media 
 Mobile App 


BRANDS

KIMMY ANDREWS

PROFILE

Gender : Female
Age : 25
Education : Bachelor's degree
Occupation : Elementary Teacher
Address : Columbia, SC



“I want to try alternative learning methods to help keep my young students engaged and encouraged in learning!”

BIOGRAPHY

Ms. Andrews is a 4th grade teacher who loves her job. She has 4 years of teaching experience. She is very engaging and loves creating activities for her students to do. Kimmy believes that students learn best when they are engaged. She struggles to find digital activities that are simple, fun, educational, and allow her students to collaborate. Kimmy wants a virtual escape room that is easy to run and will help her students learn

MOTIVATIONS

- Balancing Fun with Learning
- Wanting students to find learning fun
- Alternative Teaching methods
- Hoping students will be excited to come to class.

GOALS

- Have an escape room that is fun but also educational
- Wants the students to have fun
- Keep every student engaged
- Hopes to improve engagement in the classroom.

FRUSTRATIONS

- Escape room taking too much of class time
- Some puzzles being too difficult
- Students losing focus when the activity isn't engaging
- Activity not being age appropriate

PERSONALITY

Introvert ————— Extrovert

Thinking ————— Feeling

Judging ————— Perceiving

Sensing ————— Intuition


TECHNOLOGY

Software

Social Media

Mobile App

BRANDS



3. Constraints

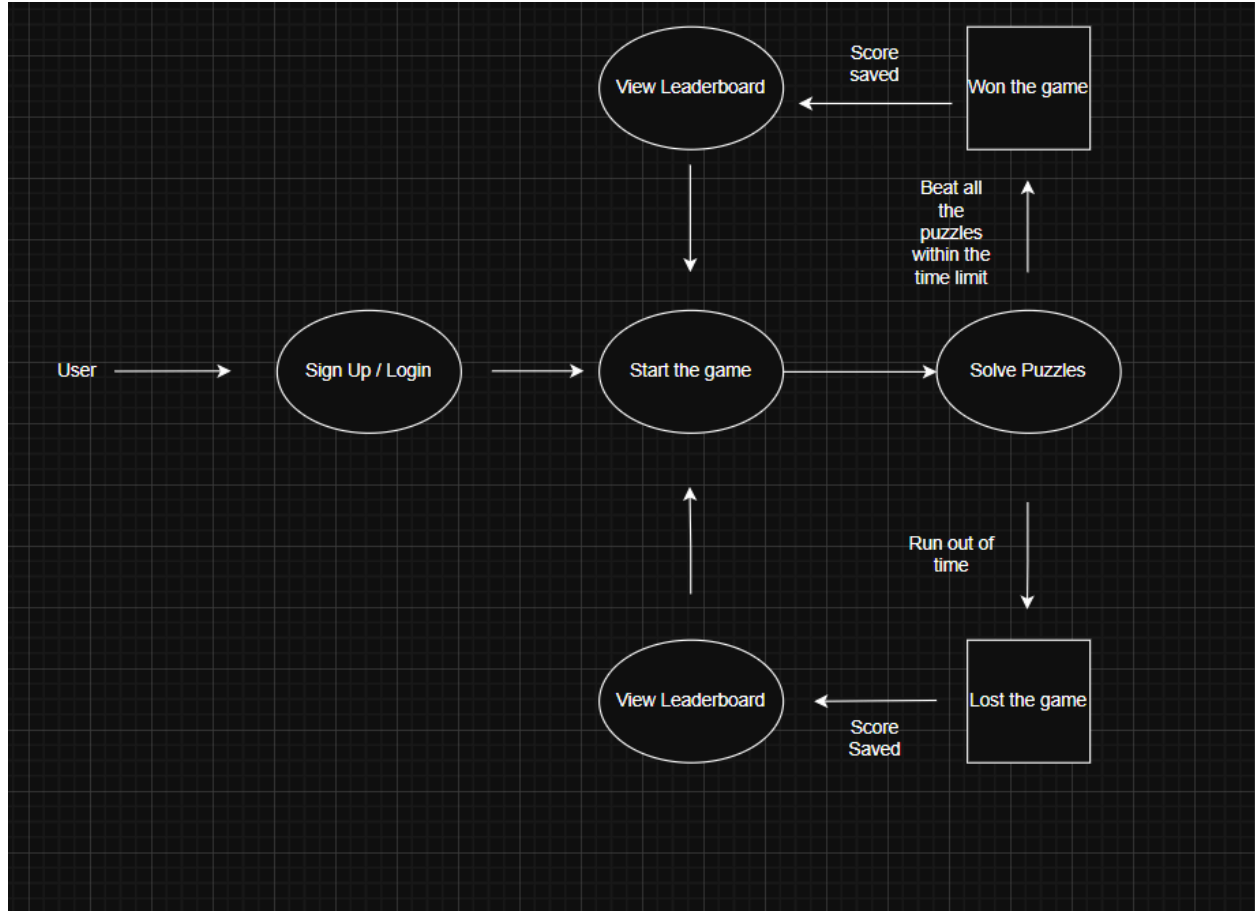
- No funds
 - We have to develop all assets and code by ourselves and cannot pay someone or pay for an online asset to include in our project
- Project must be done in java
- The project must be completed by some point within this semester
- There are only 4 team members
- This project must run on all laptops

4. Description

The escape room will use a JavaScript implementation to run. The system hardware and software components are:

- Hardware:
 - User Device:
 - A desktop or a laptop.
 - Input Devices:
 - Keyboard(for entering commands, puzzle responses, and even inventory interactions).
 - Output Devices:
 - Console or terminal window for displaying room descriptions, puzzles, and feedback for the player

5. Business Use Cases



6. Functional requirements

[The Requirements Spreadsheet](#)

7. Non-Functional Requirements

Look and Feel Requirements

- The interface of the system shall have a Catan theme that matches the story of our Escape Room.
- The game shall be consistent with input delays and fonts and color

Usability Requirements

- The game shall have clear constructions for the player to read and comprehend across the playthrough
- Gameplay hints shall be easily accessible across all puzzles

Performance Requirements

- The game shall be able to run on a computer with a valid internet connection.
- The game shall be able to load every puzzle in under 3 seconds.

Maintainability and support requirements

- The game shall be able to run on any computer regardless of the Operation System (Linux, Windows, Mac).

Security requirements

- Player data shall be securely stored in a privatized manner to keep it protected

Legal Requirements

- The game shall comply with copyright laws
- The game shall follow all data protection laws with player information

9. Competitive Analysis

	Escape Simulator (Steam)
Strengths	Great interactive environments with physics built into the puzzles. Tons of different escape rooms with great replayability for different endings. It has community-made rooms as well that are great for new experiences from different people. It has a solo or multiplayer option that can improve players' experience. With different puzzles it also offers some that are easy or hard to choose from to give every type of player the game that desire
Weaknesses	It is not a free game and costs money to purchase. It also may give an overwhelming feeling with so many options and could ruin the feeling for casual players who are looking for something simple but challenging. It also requires downloading the game which may not be available to people either. Since the game uses a physics engine that could require a strong computer to run the game which loses more players. It is not available on mobile devices as well so a younger audience will not be the games target.
Audience/Focus	Escape Simulator targets puzzle fans who own a Computer/PC. It gives these players a more immersive feeling than other online escape rooms could compare too. People who are extreme fans of Escape Rooms will come to love this Simulator.

	Pirate Panic (Free Online Escape Room)
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Strengths	Pirate Panic is a free and web-based escape room that does not require a download. It is a great pirate theme that keeps it lighthearted for the younger audience. All it needs is an email to sign up for a new account. The escape room is intended to be a kid friendly pirate themed escape room that is beginner friendly. It is great for a casual game for someone who is brand new or a young person wanting to learn about escape rooms. It is also mobile friendly and can be used on ipads and phones as well.
Weaknesses	Since it is a very easy game it does not leave any room for experienced/ adult escape room fans. The game can also feel very repetitive as you try to go through each puzzle because of how simplistic it is. The game lacks the depth of an escape room for people who are wanting a real challenge in the online puzzle format.
Audience/Focus	The targeted audience is primarily focused on kids as a learning tool for escape rooms. Beginners are also drawn towards this game as well since it is accessible to a lot of people.

	The Escape Game (Remote Adventures)
Strengths	The Escape Game is a live hosted experience that has real people playing and participating with you as you can play the game. It can give people the imagination similar to experiences like Dungeons and Dragons (DND). It has a feeling similar to what you normally experience at in person escape rooms.
Weakness	This online escape room comes with a price, literally. It is much less affordable than the other two experiences. It is much less like a programmable game and is more about the people you play with. Because you have to plan a certain time and date to play, it will require scheduling and is not an "on-demand" experience. This goes against the whole idea of being able to play an online game since it doesn't have to be done in person. The difficulty also depends on what is chosen by the people and may not be the best for every player.

Audience/Focus	This is targeted for Companies looking to create team bonding or families that want an escape room feeling without having to leave to a physical escape room. It does a great job at giving these players the atmosphere of an escape room without actually having anyone in these escape rooms at those given time.
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After the competitive analysis that was made above, we have learned much about what defines success and failure when looking at online escape rooms. This research will greatly aid our development towards a product that we can be proud of as a team. Building the right escape room is challenging but not impossible. It requires adapting to the needs of the client which is what we will be doing moving forward. Making sure to cater towards what you desire is the most important. Our goal will be to make a product that is well rounded and does not focus so much on one strength as well as not having a great weakness like the ones above as found in the competitive analysis. This will help us in the long run with our goal of making a wonderful online escape room.