

User Study Design Plan

CS3410, Team Six, Dungeon Master's Assistant

Cody Strange

Paul Pena

Ryan Hillstead

William Thackery

Goals

Summary: This is a list of what we are hoping to learn from our observations and data collection exercises, so that we can tailor the application to the user's wants and needs.

- We want to learn how we can save Game Master's time.
- We want to learn how we can enhance the experience of the Game Master.
- We want to learn how we can help remove pain points with the planning and session experience.
- We want to learn if Game Masters would use random content Generators.
- We want to learn if Game Masters would use a mobile app that connects to the desktop version?

Subjects

Summary: This is a list of all the team members and the subjects that they will be conducting observations/data collection on. Subject may include: individuals, groups, and competing software.

- Cody:
 - o Mark: Dungeon Master
 - o Roll20
 - o Fantasy Grounds
 - o World Anvil
- Paul:
 - o Jon: Dungeon Master
 - o Threads group?
 - o D&D Beyond
 - o DM's Toolkit
 - o Dungeon Master Journal
- Ryan:
 - o Eric Fletcher: Dungeon Master
 - o Video of D&D Campaign/Prep
 - o D&D Discord
- William:
 - o Carden: Dungeon Master
 - o Brendan: Dungeon Master
 - o DND Discord Group: Wide range of DM styles and a large number of responses available.

Explanation

We chose our subjects when considering who the product would affect and where it would be most useful. We want to chat with other Dungeon Masters who are planning campaigns actively so we can get their opinions on the tools they currently and actively use. Another reason we chose our subjects is experience level. We want to get a wide range of experiences so we can vet for a product that is useful for new dungeon masters as well as seasoned dungeon masters. We have also thought of communities that would be interested in our product and those communities we could send the questionnaire to.

Data Collection Methods

Summary: This are the data collection methods that we intend on using, each method has a paragraph explaining in detail why we chose to use it and brief bullet points about what we hope to get out of it that relates directly to the goals.

Interview

Conducting an interview to gather data about what a Game Master wants in a Game Master application is a great way to understand their preferences and expectations. Understanding their needs, preferences, and pain points helps ensure that the app is designed with the user in mind.

- Understand individual preferences and expectations to enhance user experience.
- Understand user pain points so we know where to save time and frustration.

Observation

Observation allows us to gain insight into processes, behaviors, and conditions. This would involve directly watching and documenting specific occurrences of a Game Master creating his/her campaign and/or running their campaign. We chose observation because it offers an unbiased perspective, eliminating the risk of participants altering their behavior due to self-awareness, which is often encountered in surveys or interviews. Additionally, it helps identify patterns that might not be explicitly verbalized.

- Gain insight of user processes so we know where we can save time.
- Compare what the user believes the pain points are located to where the pain points are truly located.
- Observe user behaviors so we know what experiences need to be enhanced.

Questionnaire

Creating and sharing a questionnaire is one of our chosen methods because we believe we will be able to get many responses by sharing it with the Dungeons and Dragons community, which is quite large. With specific and well thought questions we will be able to get specific quantitative data to give us an idea about usability and the qualitative questions will help give us ideas about how we can better cater our product to what the users want and would utilize.

- Gain large amount of generalized data regarding where game masters spend most of their time.
- Gain large amount of generalized data regarding experiences that our application to enhance.

Reviews of Current Products

Review of Current Products entails an exhaustive examination of existing market offerings. This method is used for understanding current market trends, identifying potential gaps or areas of improvement, and gaining insights into user preferences. By looking at current products we can see what works and what doesn't along with what competition there is.

- Learn what other products have been used to reduce pain points for the game masters.
- Learn why games masters may not be using these products, what pain points they are not targeting.
- Learn how popular random content generators are in other products.
- Learn if another product has a mobile companion app for a desktop app.

Observation Plan Planning

Summary: This is our plan for how we will conduct the campaign planning version of the observation plan. Each team member should take this document as a step-by-step process in how to conduct the observation plan.

Time

Moderate Session (45-60 minutes) this should give us enough time to observe the DM create multiple encounters and show us the methods and processes they use to do so.

Introduction

- Greet and thank subject.
- Explain what we are hoping to learn from the observation (refer to 'Things We Are Looking For' section)
- Explain interaction level expected.
- Explain possible follow-up.
- Explain how we plan to record the observations.

Follow Up

We will meet with the dungeon master after the planning session and confirm that the observations we recorded were valid. Along with some possible clarifying questions. Below are some questions that could be asked in the Follow Up, though team members may have to come up with questions to match the specific scenario. *Refer to interview plan for more information.*

Things We Are Looking For

We will be looking for what applications that the dungeon master uses. Along with what parts of the planning takes the longest and what causes the dungeon master the most pain.

- Planning Session
 - o Tedious Tasks (i.e., creating random characters)
 - o Applications Used and whether they are intuitive.
 - o What the dungeon master spends most of their time on
 - o What causes the dungeon master the most irritation/pain points.

Interaction Level

During a D&D campaign, interaction with the Dungeon Master by the observer is not ideal. It is possible that, by asking questions, the observer may interfere with the immersion or give away key information regarding parts of the campaign. We will keep the interaction level low and mostly take notes of what is observed. However, during the planning session,

Our interaction level is at a medium, we don't want to interrupt the DMs thoughts as they are planning out a session but we do need to know why they do specific things. We will ask the DM to try to think aloud as they are planning their campaign.

- Planning Session
 - o Medium levels of interaction with dungeon master.
 - o Question why the dungeon master is doing what they are doing, between major tasks.
 - o Ask DM to think aloud.
 - o Short follow-up interview.

How We Will Record Our Observation

Our observations will be recorded on the observations template of the data collections plan. View that template for more information. Follow ups will be recorded in the interview template.

Observation Plan Campaign

Summary: This is our plan for how we will conduct the campaign running version of the observation plan. Each team member should take this document as a step-by-step process in how to conduct the observation plan.

Time

Longer Session (1-2 hours) this should give us enough time to observe the DM go through multiple encounters and show us the methods and processes they use to do so.

Introduction

- Greet and thank everyone at the campaign.
- Explain to everyone what we are hoping to learn from the observation (refer to 'Things We Are Looking For' section)
- Explain to everyone the interaction level expected.
- Explain to the subject possible follow-up.
- Explain to the subject how we plan to record the observations.

Follow Up

We will meet with the dungeon master after the planning session and confirm that the observations we recorded were valid. Along with some possible clarifying questions. Below are some questions that could be asked in the Follow Up, though team members may have to come up with questions to match the specific scenario. *Refer to interview plan for more information.*

Things We Are Looking For

During a campaign we will be looking for what causes pauses and complications in the campaign. What disrupts the flow and forces everyone to wait for the dungeon master to fix the problem.

- Campaign
 - o Interruptions to the Flow of the Encounter
 - o Pain points
 - o Frustration
 - o Long Look-Up Times
 - o Possible Enhancements to the Encounter

Interaction Level

During a D&D campaign, interaction with the Dungeon Master by the observer is not ideal. It is possible that, by asking questions, the observer may interfere with the immersion or give away key information regarding parts of the campaign. We will keep the interaction level low and mostly take notes of what is observed. However, during the planning session,

- Campaign
 - o Low levels of interaction with dungeon master.
 - o Write down questions and scenarios to ask at the end.
 - o Have a larger follow-up interview.

How We Will Record Our Observation

Our observations will be recorded on the observations template of the data collections plan. View that template for more information. Follow ups will be recorded in the interview template.

Questionnaire Plan

Summary: The questions that we will be asking in our questionnaire along with whether they are quantitative or qualitative.

List of Questions (QT = quantitative; QL = qualitative)

1. Have you ever been a Dungeon Master for a campaign?
 1. Yes or No
2. Out of these choices, what digital tools do you use to run, or plan for, a game session? (QT)
 1. DND Beyond
 2. Roll20
 3. Owlbear Radio
 4. Foundry VTT
 5. Fantasy Grounds
 6. Donjon
 7. Fantasy Random Name Generator
 8. None
 9. Other: _____
3. What feature(s) do you enjoy from the digital tools you use? (QL)
 1. Die Roller
 2. Encounter Creation
 3. Random Content Generators
 4. Character Sheets
 5. Rules Compendium
 6. Spells List
 7. File Organizer
 8. Sound Board
 9. Messaging/Scheduling
 10. None
 11. Other: _____
4. What aspects take the longest when planning your campaign? Why? (e.i. Encounters, NPC's, organization, story writing, etc.) (QL)
 1. Open ended
5. If there was a mobile application for the tools you use, would you use the app to help you plan on the go? (QT)
 1. Yes or No

Questionnaire Link: [Questionnaire Link](#)

Editor Version: [Editor Questionnaire Link](#)

Interview Plan

Summary: There are two different types of interviews, in-depth interviews and follow-up interviews. We will have separate plans depending on the type of interview that is being conducted.

In-Depth Interview Questions

Purpose

The In-Depth interview is a long interview that is used in order to understand the dungeon master and how they run their campaign. Its purpose is to get an understanding of what the dungeon master currently uses and what they believe they need. It won't be as thorough as an observation but is less timely and easier to set up.

Time

Set aside 30-45 minutes.

Questions

1. **Campaign Planning:** "How do you usually start your campaign planning? What tools, if any, do you currently use for this purpose?"
2. **Resource Management:** "What are the most time-consuming tasks when preparing for a session or campaign? How could a tool streamline that process for you?"
3. **Gameplay:** "During gameplay, what kinds of information or resources do you frequently need to reference? What would make accessing this information more efficient?"
4. **Custom Content:** "How often do you create custom content, such as homebrew monsters, items, or NPCs? What features would make this process easier for you?"
5. **Integration:** "Which other digital tools or platforms do you frequently use for D&D? How could a new tool integrate with or complement these existing tools?"
6. **Engaging Players:** "How do you currently track and manage player engagement, backstory integration, and character arcs? What features in a tool would help support this?"
7. **Visual Aids:** "How important are visual aids (like maps, tokens, handouts) in your games? What functionalities do you wish you had when dealing with them digitally?"
8. **Rules and Mechanics:** "Are there specific game mechanics or rules that you often find yourself double-checking or having difficulty managing during play? How could a tool help you with this?"
9. **Collaboration:** "How do you collaborate with your players outside of game sessions (e.g., backstory development, session scheduling, loot distribution)? What features would simplify this?"
10. **Wish List:** "If you could have one 'dream feature' in a DM assistant tool, something that doesn't exist yet, but you wish did, what would it be?"

Follow-Up Interview

Purpose

The follow-up interview is a brief interview after an observation used to answer clarifying questions and confirm with the subject that all the information you have gathered is correct. These are vaguer as depending on how the observation goes depends on how/what questions you would need to ask.

Time

Set aside for 5-10 minutes.

Questions

- "I noticed while doing 'x' action you seemed to struggle in 'x' way.
- "Why did you choose to use 'x' method/application to accomplish 'x' action?"
- "Would you agree that 'x, y, z' actions could be considered pain points?"

- “Would you use an application that could reduce the pain of accomplishing ‘x, y, z’ actions?”

Reviews of Current Products Plan

Summary: We go over which products we plan on reviewing and how we plan on reviewing them, through their ratings and user reviews.

List of Products

- D&D Beyond
- GM's Toolkit
- Game Master Journal
- Roll20
- Fantasy Grounds
- World Anvil

Rating

For each of the products we will list what the overall ‘star’ user rating for them are to quickly gauge which products we want to try and more closely follow.

- 1 - 5 stars

Reviews

For each of the products we will list both the positive reviews and the negative reviews, this will help give us insight into what users are looking for in their digital applications. Along with helping us see what is currently working and what is not.

- Positive reviews
- Negative reviews

Data Consolidation

Summary: These are the work models that each of the team members plan on creating.

Models

Cody: Use Case

Paul: Persona, Scenario, Goal

Ryan: Hierarchical Task Analysis

William: Flow Model

Affinity Grouping

Lucid Spark will be how we will display our affinity grouping.