



---

# MILESTONE 4 PLAYTESTS

---

Riley Roberts



# Glossary

<b>Page</b>	<b>Section</b>
1	Glossary
2	Intro
3	Questions to Answer
4	Sampling and Bias
5	Testing Instrument
6	Discussion of Testing
7	Results and Analysis
9	Actionable Data

# Intro

This is a summary of the methodology and data of the milestone 4 playtests. If you are a member of the team, it is likely that you want to skip to a concise summary of actionable data, which begins on page 9.

## Game Description

Team Name: Purloin

Engine: Unreal 4.19.2

Project Name: Night Heist

Genre: Action-Stealth

**High Concept:** “Night Heist” is a 3D networked multiplayer action-stealth game set in a sci-fi setting where two teams of two players attempt to defend or steal precious artifacts from a museum filled with various security. Thieves will attempt to steal precious artifacts while guards will do their best to prevent this.

## Build Info

These tests were unfortunately conducted with multiple builds with various levels of stability. They all had a roughly functioning gameloop that required tester-instruction and direction, especially in the beginning and between rounds. The first build had glitches as extreme as double-spawning objectives and a glitch that prevented guards from arresting thieves. The last build had no gamebreaking bugs. If you're a team-member looking for more information, these tests were done from 11/17/18-12/07/18, so check Perforce around that time for the state of the game.

# Questions to Answer

These were tests done with more resources (members of the team, available testers, time) and time than we have normally had, so we are able to have more questions-to-answer than usual.

## Questions for all builds:

- What bugs exist, and how are they triggered?

These bugs will be found through observation and screen recording.

- How do the thief and guard feel?

Players are asked to describe how the characters feel in a post-game survey, we're looking for the guard to feel powerful and intimidating, while we want the thief to feel sneaky.

- Do players understand the objective of the game?

This is measured through observational data, we simply explain the objective and observe player behavior. If they end up forgetting/asking questions about the objective, this is a no.

## Questions for the completely stable builds:

- Which character do players prefer to play as?

This is a simple post-test survey question. This was asked in-person.

## Questions for future builds:

- What abilities are overpowered or underpowered?

I will be speaking with the tech team about implementing telemetry to help us gather data on this.

It's possible I can implement a simple version myself.

- Are players cooperating and using teamwork?

# Sampling and Bias

This research uses a convenience sample of students at DigiPen Institute of Technology.

This could bias participants, as they are friends and colleagues of the developers. Ideally, I would be using a human subjects pool, but that isn't an option here.

I am biased because I am a member of the team that is developing the game.

# Testing Instrument

## Script

There were varying scripts for these tests, however, all testers receive the following information:

- The premise of the game
- The objective
- The controls
- Gamebreaking bugs (depending on the build)

All questions relating to these items are answered.

## Survey

The survey is broken up into two parts. First, a pre-test survey collects basic demographic data and attempts to account for bias, specifically players who have previously played the game. Players then play the game and fill out a post-test survey, which gathers data on the gamefeel of both characters and general feedback on the game. If you are a member of the team, the survey can be found in google docs through Purloin>Design>Playtesting>Surveys and Scripts>Survey 3.

# Discussion of Testing

Some of these tests were done more informally than usual, as we were testing at a school-wide LAN party. We sometimes had our own developers fill in when we didn't have enough players. We also tested multiple builds throughout the night, as bugfixing was done during and between tests. We had 19 total testers fill out surveys during the LAN party, and 7 total testers after it for a total of **26 playtests**.

Moving forward, a goal for most future tests should be to have a single build and a single script. Next test we should continue to test gamefeel, while also beginning to test balance and cooperation. In the distant future, testing outside of DigiPen and with greater numbers would be a significant improvement, but it is unlikely either of these things will happen anytime soon.

# Results and Analysis

What bugs exist, and how are they triggered?

List of bugs we found which were not fixed the same day (to my knowledge):

- Guards can kick artifacts
- Camera clips through walls
- Guard UI is broken
- Timer is broken

We ended up fixing almost all the bugs we found the same day we tested, so I won't list the ones that have already been taken care of. This test ended up being extremely helpful for finding bugs, but so many were quickly resolved that we now have very little data for this question, which is actually a good thing.

How do the thief and guard feel?

**The thief feels sneaky and fluid, but also has camera issues. The guard feels slow, clunky, and solid, some players seem to dislike the relative lack of mobility.**

The thief was described as **sneaky** three times, and **fluid** twice. This is extremely positive, as this is the type of feeling we're going for. The guard was described as **slow** three times, and both **clunky** and **solid** twice. Slow is probably fine with the designers, solid is good, and clunky is a potential problem.

I will be focusing on the negative feedback for each character, as it provides the most potential for actionable data.

**Problems with the thief:** disorienting, wall-clipping, glitchy, twitchy, confusing, too close when climbing tight passageways.

Most of the problems with the thief seem to relate to the camera, which we already know has problems. Going forward, fixing the camera and tuning the controller of the thief could be a priority. This will be discussed further in the design discussion.

**Problems with the guard:** slow, clunky, odd, restricted, wish I could jump, grenade bounce was unpredictable

Most of the problems with the guard seem to stem from the relative lack of mobility, but that could be fine if players still enjoy playing as guards. “Slow” is fine, but we want to try to avoid the character feeling “clunky.” This will be discussed further in the design discussion.

Do players understand the objective of the game?

**Yes.**

All observational data points to yes, players generally seemed to understand the objective, and they should hopefully have an easier time once the objective is better communicated by the game instead of directly by a developer.

Which character do players prefer to play as?

**Roughly evenly split.**

Simply put, within the 15 people that received this question, it was split 8/7 in favor of the guards. Players weren’t significantly more likely to select characters they won with, nor significantly more likely to select the character they tried first.

# Actionable Data

I avoided sorting these by priority because I want to discuss them with the design team so that we can all decide the priority of the items listed and delegate tasks accordingly. Some of these are just suggestions based on the data, and, after each item is discussed individually, it's possible some of them will be removed.

- **Artifacts:** We should discuss how dropping artifacts should work. Do they have physics? Can guards pick them up? Can guards just reset them to their original position?
- **Gas grenade:** The gas grenade is currently easily the least powerful ability in the game, we should discuss how we're going to buff it. I would suggest making the radius of the gas bigger.
- **Guard gun:** Getting shot by the guard gun needs to have some sort of knockback effect or something similar, because right now it's too weak in certain scenarios, especially when thieves are above the guards, and there's no way for the guards to come up or knock them down.
- **Guard mobility:** We might consider giving the guards increased options for mobility, unless the design team wants the contrast in mobility with the thief to be as significant as it currently is. Either way, the guard currently seems to feel clunky, so we might want to work with the camera and character controller to improve the gamefeel.
- **Telemetry:** I will discuss the best way to do this with both tech and design, as we need to find the most efficient way to implement it into the engine, then we can assign this task the appropriate priority.

- Thief agency: Melee being able to destroy guard items might give the thief more agency, we might also consider a way to un-stun yourself quicker.
- Thief camera: The thief camera should be improved, there are problems with it whenever the player gets near walls or into a tight space. The character controller should also probably be improved.
- UI: The UI is flawed, and the guard UI is broken. Going forward I will continue to iterate on it, and next semester our UI artist should be able to clean it up.

Beyond all of this, everyone should be able to focus on their usual tasks and completing the full game-loop. If you have any questions about any of these items, don't hesitate to contact me. If I've missed anything, please talk to me before adding it, as I want to make sure I'm aware of it.