

IGB100

Playtest Report

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1.0 Playtesting Plan

Date	Participants	Overall approach, including resources required	Session Goal	Method		How to analyse
				What to measure	How to test	
20/04/2025	Playtester 1: Ruby Playtester 2: Salim Playtester 3: Riley Playtester 5: Jake	Computer with a camera to record, taking notes with either another computer or paper and a pen.	Student 1: Rebecca Cole Focussing on environment design and visuals.	How will you measure the session goal and focus? I will measure the session's goal and focus by asking questions that more target the environment and design to gain a detailed insight. Will this be vocal, sight, expressions, questions, roadblocks? It can be measured by rewatching the recording and analysing the facial expressions and listening to verbal feedback that the playtester was saying.	When will you note/ document the method? During the playtest, as well as after through the use of note taking and prepared questionnaires.	How will the playtest data be analysed after playtesting? The playtest will be analysed through answers from the post questionnaire as well as any further notes taken by myself.
			Student 2: Tomohiro Nakayama Focusing on gameplay.	How will you measure the session goal and focus? I will assess the session's objectives and focus by asking questions that specifically target gameplay and experience to gather a deeper understanding. Will this be vocal, sight, expressions, questions, roadblocks? It can be assessed by reviewing the recording, analyzing the playtester's facial expressions, and considering the verbal feedback provided.	When will you note/ document the method? During the playtest and after collecting the questionnaire responses.	How will the playtest data be analysed after playtesting? The video during the playtest is important, as it captures what the tester is saying and their feelings. Notes taken from this are also crucial. Another important element is the answers from the post-playtest questionnaire.

			<p>Student 3: Zachary Price</p> <p>Focussing on animation and assets.</p>	<p>How will you measure the session goal and focus?</p> <p>I will measure it through player feedback, observed behaviours, and any moments of confusion or engagement.</p> <p>Will this be vocal, sight, expressions, questions, roadblocks?</p> <p>Yes, I will observe vocal responses, facial expressions, questions asked, and any roadblocks encountered during gameplay.</p>	<p>When will you note/ document the method?</p> <p>I will take notes during the session and expand on them after, along with post-playtest questionnaire responses.</p>	<p>How will the playtest data be analysed after playtesting?</p> <p>I will analyse the data using questionnaire results, a log of observed glitches or issues, and patterns in player behaviour and feedback.</p>
20/05/2025	Playtester 4: Manho		<p>Student 4: Krittaya Kruapat</p> <p>Focusing on game's visuals and UI/UX</p>	<p>How will you measure the session goal and focus?</p> <p>I will measure these by the player response, which will also comment on the effect of visuals and UI/UX on the overall feel of the game.</p> <p>Will this be vocal, sight, expressions, questions, roadblocks?</p> <p>Feedback will include vocal feedback, observed feedback (, voice or same kind questions, and potential obstacles or frustrations.</p>	<p>When will you note/ document the method?</p> <p>I will note the procedure pre-, during, and after the playtesting.</p>	<p>How will the playtest data be analysed after playtesting?</p> <p>I will analyse the data from playtesting by referring to the documentation that has been made before, during, and after the playtest.</p>
			<p>Student 5: Daniel Crook</p> <p>Focusing on programming and level generation</p>	<p>How will you measure the session goal and focus?</p> <p>I will measure it by observing the players reaction to the obstacle sets. As well as feedback on the generation. I will also record any bugs or errors that they encounter and how they react to them.</p>	<p>When will you note/ document the method?</p> <p>I will record the session and write detailed documentation of the session after playtesting.</p>	<p>How will the playtest data be analysed after playtesting?</p> <p>I will use the data to create a triage of issues and improvements to make and add them to the</p>

				<p>Will this be vocal, sight, expressions, questions, roadblocks?</p> <p>I will collect this feedback from vocal feedback on their experience and particularly focus on any roadblocks that they face due to generation errors.</p>		development cycle.
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2.0.1 Summary of Results: Rebecca Cole

Issue ID	Severity	Identified By	Issue Description	Strategy to Address Issue
1.0	Catastrophic	Playtester #1	The player felt that the pick-ups weren't obvious, and even when they were collected it didn't feel like they were for anything, a lack of goal and reward system. This is caused by little development in Cycle 2, with plans to give the pick-ups a purpose in later stages.	By adding an element that makes the scrap more obvious such as particles, emission, or animation it will solve the issue of it not being obvious to the player. Adding extra UI elements such as a charge up aspect will show the player that the scrap needs to be collected for something to happen.
1.1	High	Playtester #1	The player felt confused when they started the game, there was no direction on what to do, leading to instantly failing and having to restart. This is caused by no tutorial or area where the player gauges what to do before they start jumping.	Adding a short tutorial or a guide at the start of the game will allow the player to learn the controls and allow them to understand what is going on before the game starts. This could be implemented by having the player infinitely running on a long platform building until the player presses a key to initiate the game. This solution will also allow us to add a short tutorial showcasing the controls and goal of the game.
1.2	Moderate	Playtester #1	The player felt the layout of the jumps felt off, including distance between them and their lack of variety (such as length and width). This was caused by the buildings not changing based on the player's speed overtime.	By improving our current procedural variation we will be able to solve this issue, this will be done by calculating longer jumps based on the players speed. Adding visual or audio cues may also help the player determine certain jumps which will be trialed in Cycle 3.
1.3	Low	Playtester #1	The player found the character to be quite glitchy when it came to falling off of buildings and collision issues with clipping. This is caused by the colliders not being foolproof and issues with the player collider and possibly player animation.	By refining our current colliders by shape and alignment on the player and buildings the clipping / glitching issues will be solved. If it is still an issue in the future, different colliders will be tested.
1.4	Cosmetic	Playtester #1	The player found the environment to be too bright and too dark in different areas of the game, it became distracting when it was too bright. This was caused by unevenly distributed assets between each section, and others not yet being developed.	Adjusting current lighting and evenly distributing assets that have emission on them will allow for the game to feel evenly lit. By tweaking the post processing and shaders that have been made will improve the overall look and feel.
1.5	Cosmetic	Playtester #1	The player found the overall visuals appealing but said there can be many improvements and polishing in the next version of the game, things that need working on are lighting, asset polishing, and to make more assets noticeable than others, e.g the scrap having	Refining materials, lighting, and creating consistent assets will improve the overall look of the game, by reassessing and updating our current assets with refined colour pallets and design choices there should be no issue visually for

		emission and then the buildings having less emission or brightness.	Cycle 3.
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2.0.2 Summary of Results: Tomohiro Nakayama

Issue ID	Severity	Identified By	Issue Description	Strategy to Address Issue
1.0	Catastrophic	Playtester #2	During gameplay, the background buildings disappeared, but they reappear later.	It is necessary to add the background again and test to check if there are any remaining bugs.
1.1	High	Playtester #2	There were several instances where the player got caught on building objects when jumping. This occurred more frequently as the game speed increased, which negatively impacted the smooth running experience.	It is necessary to improve the collision detection of the character and buildings. In some cases, adjusting the layout of the buildings may also help resolve the issue.
1.2	High	Playtester #2	Upon restarting, the player tends to fail quickly due to the game starting too abruptly. A longer platform at the beginning is necessary to give the player time to prepare before initiating actions such as jumping.	Another approach is to extend the starting path or significantly reduce the initial speed at the beginning of the game.
1.3	Low	Playtester #2	The player checked to see if there was a home screen.	It is necessary to add a home screen and assign appropriate functions to the buttons.
1.4	Low	Playtester #2	The sudden changes in speed can sometimes make it difficult for the player to react properly.	Adjusting the speed and adding effects can help players notice changes in speed more easily and respond accordingly. For example, adding visual effects or sounds right before the speed increases can prepare players mentally for the upcoming challenge.

2.0.3.1 Summary of Results: Zachary Price

Issue ID	Severity	Identified By	Issue Description	Strategy to Address Issue
1.0	Catastrophic	Playtester 3	The player experienced glitches where they passed through buildings. This caused confusion and broke immersion.	Investigate collision detection systems. Adjust mesh colliders or physics on buildings to prevent unintended clipping or falling through the environment.
1.1	High	Playtester 3	Game elements such as buildings and scraps disappeared intermittently during gameplay.	Ensure assets are not accidentally unloading or being culled too early.
1.2	High	Playtester 3	Player asked if there was a way to speed up intentionally, tried Shift and W key.	Consider adding a speed boost power-up or optional sprint mode. Or, communicate that game speed increases over time only.
1.3	Moderate	Playtester 3	Player attempted to explore alternate routes by jumping between buildings, unsure if this was allowed or functional.	Clarify navigable space limits or develop alternate routes as intentional gameplay paths.
1.4	Moderate	Playtester 3	Requested post-run screen with best run tracking for personal competition.	Create a game over screen showing current score and high score, encouraging replayability.
1.5	Low	Playtester 3	Player attempted to glide/fly by clicking, assuming that was part of the controls, but the player only jumps.	Include a short pre-run control tutorial or tooltip.
1.6	Low	Playtester 3	The player kept pressing 'W' even though the character moves automatically.	Add feedback when non-functional keys are pressed, or clarify controls at the start with a brief prompt.
1.7	Low	Playtester 3	Player was unfamiliar with endless runners on PC but found controls intuitive.	No immediate action required, though important to highlight ease-of-use.
1.8	Cosmetic	Playtester 3	No formal issues with art style. The player found visuals appealing and appreciated the non-distracting aesthetic.	Maintain current visual direction. Possibly build on the unique aesthetic with more futuristic elements or environmental storytelling.
1.9	Cosmetic	Playtester 3	Suggested the addition of obstacles you can go under or through to increase challenge and variation.	Add obstacle types (low-hanging beams or tunnels) to provide varied movement strategies.

2.0.3.2 Summary of Results: Zachary Price

Issue ID	Severity	Identified By	Issue Description	Strategy to Address Issue
1.0	Catastrophic	Playtester 5	Player encountered a glitch at around the 150 mark where the robot became stuck mid-air and could no longer jump.	Debug jump logic and animation state transitions. Check for collision states or animation interrupts that might prevent proper jumping behavior.
1.1	High	Playtester 5	Robot did not jump during some runs even when the player pressed the key, leading to unresponsive controls and repeated deaths.	Refine jump input detection, particularly at higher speeds. Ensure reliable input polling and responsive jumping mechanics.
1.2	High	Playtester 5	Alternate route scrap difficult to reach and unclear if it was worth the risk. Player assumed it was more valuable but no visual cue confirmed this.	Change the scrap's color/design for alternate routes to visually differentiate it.
1.3	Moderate	Playtester 5	Slide mechanic was surprising and enjoyable, but unclear when and how to use it. Player never encountered a scenario requiring it.	Introduce slide mechanics earlier with a small tutorial or mandatory obstacle to teach its use. Ensure early obstacles prompt this action.
1.4	Moderate	Playtester 5	Player thought the ability to control jump height (by rolling mid-air) would make it more precise, especially at higher speeds.	Consider adding a mid-air roll mechanic that fast-drops the player, similar to Subway Surfers, to enhance aerial control and precision.
1.5	Low	Playtester 5	Game started slow, which was helpful for learning, but lacked variation in the early phase.	Introduce simple obstacle variation earlier (low barriers or ceiling obstacles to slide under) to increase engagement without overwhelming new players.
1.6	Low	Playtester 5	Scrap and robot scale felt too large in foreground, potentially reducing field of view and awareness of alternate routes.	Scale down foreground elements slightly to improve spatial awareness and visibility of surrounding paths and objects.
1.7	Cosmetic	Playtester 5	Player liked visuals but felt the purpose of off-path scrap was not visually intuitive.	Improve visual hierarchy, make special scraps more distinct (glowing, animated, or color-coded) to communicate purpose and value.

2.0.4 Summary of Results: Krittaya Kruapat

Issue ID	Severity	Identified By	Issue Description	Strategy to Address Issue
1.0	Catastrophic	Playtester #4	There are no Catastrophic Issue	
1.1	High	Playtester #4	Jump timing and collisions are tricky, making it hard to collect scraps consistently.	Tweak collision detection and refine jump mechanics for smoother scrap collection.
1.2	High	Playtester #4	Movement options are limited (left, right, and jump) which limits gameplay variety.	Add new moves like dash, slide, or other abilities to keep gameplay fresh and engaging.
1.3	Moderate	Playtester #4	The level design repeats too much and lacks new challenges, making the run feel monotonous.	Add traps or obstacles that can slow the player down or add difficulty to keep players on their toes.
1.4	Low	Playtester #4	Controls and upgrades unclear; some keys (like 'W') gave no feedback, causing confusion.	Improve UI prompts and tutorial elements to clearly explain controls, upgrade functions, and provide input feedback.
1.5	Low	Playtester #4	The UI pause/stop button was not noticeable; the player used the ESC key to pause.	Make pause/stop UI button more prominent and intuitive; consider adding on-screen hints for controls.
1.6	Low	Playtester #4	Music speeds up, but the game doesn't always match that with increased difficulty or more jumps..	Make the gameplay challenge scale more noticeably with speed, encouraging more active jumping.
1.7	Cosmetic	Playtester #4	The visuals look great but the levels feel a bit short and could last longer.	Extend level duration and pacing to keep players engaged for longer sessions.

2.0.5 Summary of Results: Daniel Crook

Issue ID	Severity	Identified By	Issue Description	Strategy to Address Issue
1.0	Catastrophic	Playtester #6	There are no Catastrophic Issue	
1.1	High	Playtester #6	Collision glitch causing player to get stuck on a building, stopping progression.	Check the blender exports for errors and add checks to ensure that it does not happen.
1.2	High	Playtester #6	Input inconsistency, especially near edges, causing jumps not to register	Check the blender exports for errors and add checks to ensure that it does not happen.
1.3	Moderate	Playtester #6	Sideways movement feels unnatural and abrupt	Continue to test and refine the horizontal movement possibly altering animations, rotation and tilt of the character.
1.4	Low	Playtester #6	Scrap collection not prioritised by players.	Enhance visuals for scraps and explanations in tutorials.
1.5	Low	Playtester #6	Level design feels repetitive, limited variation in paths and obstacles.	Continue to develop and add new level designs into the game.
1.7	Cosmetic	Playtester #6	Basic player character design doesn't fit the scenery.	Add in the newly designed character and continue to refine the player design.

3.0.1 Discussion of Feedback: Rebecca Cole

Overall the playtester found the game engaging, fun, and unique visually during the playtest. Throughout the playtest many key issues were found as the player played our game multiple times. Some of these issues include lack of knowledge of the game mechanics, visual confusion through map building, and bugs that shortened the gameplay. All of these are critical key factors that can create a bad player experience and affect how the game is portrayed.

One of the first issues that arose was that the player didn't understand that the point of the game was to parkour through a city, this meant the player fell many times at the start of the session before they actually started playing the game. Once the player understood the jumping mechanic it became apparent that the collectable we have wasn't obvious enough to be something that the player should care about or pick up, and even when it was collected there was no reward or use for it. Another key issue found was that the player glitched through many platforms, whether it was on the side of a building or even clipping on the side of it when it should've allowed them to keep going, this caused most sessions to become cut short.

Once the premise of the game was understood the player then became worried about the visual aspects of the game, such as unequal lighting either being too bright or too dark, which caused the player to become distracted. Although this was not a major issue compared to the others, it is still a flaw in our environment building and decoration process.

To fix these issues we will reiterate new versions of parts of our game in cycle 3, this includes a tutorialised section at the start of the game that allows the player to initiate the start of the game and be informed on what controls to use to play the game. We will also revisit our colliders for both the player and the objects they collide with and also try to evenly distribute lighting and assets throughout each section of the game to keep it seamless. Multiple playtests will be conducted to figure out any additional key issues for our project before submission of cycle 3, while also solving any major and minor bugs / issues that arose from these playtests in cycle 2.

3.0.2 Discussion of Feedback: Tomohiro Nakayama

After conducting a playtest with a player who has played Minion Rush and is also familiar with games from various genres, we were able to receive positive feedback regarding both gameplay and user experience. Overall, the player enjoyed the game and gave it a high score of 8 out of 10. He praised both the game design and the gameplay itself.

Since he is an experienced gamer, he was able to understand how to play without any explanation of the controls and continued playing smoothly. He also figured out that collecting scrap increased the score. However, he tried pressing the Shift and Control keys to see if he could accelerate or decelerate the player. This highlighted the need to create a tutorial or help page to communicate such mechanics clearly to players.

There were also some bugs, such as the player getting stuck in or clipping through buildings. These issues negatively affected the gameplay experience and need to be fixed. Additionally, we observed that scrap objects and background buildings occasionally disappeared during gameplay. These are critical bugs that should be addressed.

Moreover, although the game is designed to gradually increase in speed and become more challenging, the player appeared confused when the speed changed abruptly. It may be helpful to implement visual or audio cues such as changes in background elements or sound to inform the player when the game is speeding up.

The player particularly liked the game's visuals. He especially appreciated the colorful building windows and the neon city atmosphere. This indicates that the visual design is a strong point that appeals to players. He also suggested that adding branching paths would make the game more interesting. This feedback is very valuable and worth considering for implementation by Cycle 3.

Based on this feedback, we need to focus on eliminating major bugs and implementing helpful tutorial systems. Additionally, improving the character's movement will further enhance the overall gameplay experience.

3.0.3.1 Discussion of Feedback: Zachary Price

After running a playtest with someone who has played endless runners like *Temple Run* but doesn't consider himself skilled at fast-paced games, we were able to gather useful feedback on both gameplay and user experience. Overall, the playtester enjoyed the game and gave it an 8/10 in regards to enjoyment, especially liking the futuristic look and simple style that didn't distract from gameplay.

There were a couple of big issues that stood out. First, the player glitched through some buildings, which was confusing and broke the flow. Fixing the collision system is a top priority to make sure that the player stays on track and doesn't fall through the environment. There were also moments where buildings and scrap pieces disappeared during the run. This made the game feel buggy and inconsistent. We will need to check what might be causing this and make sure all objects stay visible when they're supposed to.

The player also asked if there was a way to speed up and pressed keys like Shift and W in an attempt to do this. This shows that the current design, where the game speeds up gradually, might not be obvious to new players. It might be helpful to either make that progression clearer or add a simple mechanic like a temporary speed boost to meet player expectations.

Another thing that came up was that there's no end screen showing the final score or high score. The player mentioned they weren't keeping track of the score while playing and would have liked a way to know what to beat next time. This is something we definitely need to include to encourage replay value and make the experience feel more complete.

There were a few smaller points that came up too. The player tried to explore by jumping between buildings and wasn't sure if that was allowed. We will either need to clarify the limits of the world or develop those alternate paths into something more intentional. He also clicked during the game to see if the player could glide or fly, and kept pressing 'W' even though the character moves automatically. These actions show that we need to add a quick pre-run tutorial or control guide so players understand how the game works before they jump in.

Lastly, the player loved the clean, futuristic visuals and how the game didn't try to pull attention away with lots of clutter. He liked that the character animation felt believable and that the world was unique. He also suggested adding new obstacle types like things to duck under, which would add more challenge and variety to the runs. This is something that would really help with long-term engagement.

Going forward, we plan to fix the major gameplay bugs first and then work to improve the player feedback, tutorials, and score tracking to make the game easier and more rewarding to play.

3.0.3.2 Discussion of Feedback: Zachary Price

This round of playtesting was conducted with a moderately experienced player who had previously played endless runners on mobile devices. The session provided important feedback on both the game's functionality and player perception of its mechanics.

From the start, the player gravitated toward the instructions menu without prompting, which confirmed that the control scheme was intuitive and well-presented. He noted that the controls felt natural and familiar, making the game immediately accessible. Movement was described as smooth and easy to grasp, even without prior exposure to this specific game. The visual design also received praise for being engaging and easy on the eyes.

Early into gameplay, the player encountered a few technical issues that significantly impacted his experience. During one run, the character froze mid-air and became stuck in a glitched pose, preventing any further input and ultimately leading to a game over. There were also repeated instances where he attempted to jump but the input did not seem to register. These moments broke immersion and led to frustration. Addressing these bugs is now essential to ensure consistent control and avoid progression-blocking errors.

The scrap collectibles located off to the side caught the player's interest. He correctly assumed these carried more value because of the added difficulty in reaching them. However, he felt this was not clearly communicated by the game. He recommended using visual cues such as a distinct color or glow to better indicate their importance. Additionally, he found it nearly impossible to collect them and return to the main path successfully. Once on the side platform, there was often no continuation, forcing a risky jump back with little chance of success. This imbalance made the alternate paths feel incomplete and unrewarding.

The slide mechanic came as a surprise, in a positive way. The player thought it was an exciting addition but felt its purpose was unclear since it was not introduced early enough to understand when and how it should be used. He suggested that including a simple obstacle at the beginning to encourage sliding would help players learn the mechanic naturally. He also proposed adding the ability to use the slide while airborne as a way to fall faster, offering greater control as the game speeds up.

In terms of pacing, the player felt the game started a bit slowly but acknowledged that this helped with learning the basic controls. He did mention that after the initial section, the speed increase made the game much more engaging and rewarding. He also noticed the visual scale of the scrap and character could be adjusted slightly. A smaller player model and collectibles would open up the visual field, helping players better anticipate alternate routes and navigate more effectively.

Overall, the player found the experience enjoyable and appreciated the balance between accessibility and challenge. With improvements to the bug fixes, clearer signposting of alternate objectives, better integration of mechanics like sliding, and some visual scaling adjustments, the game has the potential to feel both polished and deeply engaging.

3.0.4 Discussion of Feedback: Krittaya Kruapat

Upon a playtesting session, I not just monitored the player's movements and reactions but also observed the effects of the user interface and their final experience.

The player not only enjoyed but also loved the city pictures in neons and the sci-fi vibe that the visuals brought. Apparently, this was a complete success, as it really set the right atmosphere. Nonetheless, there were a few spots that needed to be worked on, where the experience could be way better.

Situation where inconsistency in jump timing and collision detection occurred was the main causes of trouble in the game continuity; thus, the parts of the scene just become a little bit boring because of too much gathering of scrap. It is a necessity that the controls and collision systems also be more accurate by the time of the movement of the players so that the game is not just smooth, but it is also pleasant for the players.

Having only a few options to move was another thing that people complained about. While in the current version of the game the player could only move left, right and jump, the opinion was that it would be great to have more features like dashing and sliding, which would exert the ability to display the superior numbers and the high level of the emotional intensity.

The designers responsible for creating gameplay for levels exposed to it were doing the same things, again and again, and this produced a rather negative effect, namely, it made the gaming experience boring. So, different obstacles and traps can contribute a lot to the game atmosphere, as well as, challenge the players, more.

One of the findings that stood out was the UI, in particular the pause/stop button. The fact that the user did not react to the on-screen pause button and, as a reflex, used the ESC key instead is quite interesting. This clearly indicates that the UI has to be made more user-friendly and conspicuous, perhaps by the inclusion of an explicit on-screen sign, making the player aware of the means of controlling the game.

The matter of the upgrade methods and control button selections was also not fully clear to someone, such as the pressing of the 'W' key when it did not have an effect. A brief demonstration or little tips regarding the controls and the way to get upgrades would be beneficial in the way that it could provide the players with enough information to understand and be sure about their actions during the game.

Also, while the tension-rising music effectively raised the pressure, the increase in gameplay challenge was not in sync with the music that always failed to match the intensity of the game. The sound hints could be more consistent with the hardness of the gameplay and thus could leave the players engaged and immersed throughout the game.

The game's art and sound design being creditworthy, the aforementioned problems, that is control responsiveness improvement, gameplay variety, UI clarity, and tutorial support would be basic requirements to CityBot's transition from a decent game to a polished and enjoyable experience were validated in this playtest.

3.0.5 Discussion of Feedback: Daniel Crook

This playtest was conducted by a highly skilled player who had previous experience with many different endless runner style games. Their experience within the genre was useful as it provided a valuable contribution into the game's mechanics and overall appeal.

The player commented on how they were easily able to grasp the control system and mechanics, describing it as easy to understand and intuitive. He noted that the instructions were good and clear and the movement and jumping were straightforward to grasp. However he did comment on the use of 'WASD' instead of arrow keys but did not have a strong preference for either approach. However, a customisable control system may improve the experience as the user can pick the system which fits their habits.

One of the early comments from the tester was about the game's visual colour style which they described as 'crisp' and 'modern' and initially engaging. However further into the playtest they commented that after time the scenery lacked variety and suggested the implementation of alternative environments or a greater diversity of decorations and scenery. They did not think the current character design suited the game and thought it was over simplistic however, this has already been updated to a new design.

The player encountered a few minor bugs along the playtest, the first was an issue when jumping at the very edge of a building they found it could be inconsistent. This caused the player to feel frustrated as they had lost not due to their own fault. Additionally he experienced a bug where some buildings stopped the player when they were not in contact with any obstacle. This error cascaded into another error where due to the player getting stuck unexpectedly the next section of obstacles did not spawn in the correct position. Overall the bugs broke the player immersion however these are both previously known bugs with fixes in the pipeline.

The player's disregard for collecting scrap highlighted the gap in the game's communication of key objectives. Although he was aware that they would cause player upgrade he did not prioritise trying to collect them instead preferring to achieve maximum distance instead. This raises an important question of whether the game should keep track of a distance score as well as a scrap score. The player preferred this idea and would have also like the scrap more deeply integrated into the game by being able to use for example as a currency for future cosmetic upgrades.

His feedback on level design focused on the lack of variation, this has however now been improved with a greater variety of working levels across all difficulty ratings. The player commented that they would have liked to have seen additional elements such as branching paths and dynamic obstacles. His suggestion was some sort of projectile such as a laser that the player would have to avoid while playing.

The player did enjoy levels with elevation changes and enjoyed climbing up repeated obstacles. However, they found the horizontal movement unnatural and commented that it needed improvement. He also commented that the sliding mechanic felt disjointed from the rest of the player mechanics and would have preferred a more integrated animation that fit in with the existing animations.

Overall, the player had a positive experience playing the game rating it a 7 out of 10 at the time. He commented that with the planned improvements and a couple additional tweaks and polish the game could deliver an overall engaging endless runner that they would want to play.

4.0 Supplementary Materials

4.1 Playtest Script

Thanks for agreeing to participate in our playtesting of City bot. As we are conducting tests with several people, we have created a short script which I will read to you now to ensure we provide the same information to each person during these tests. Just to let you know, this session is being recorded for the purpose of improvements and additional study if required.

Today's test will last around 5-10 minutes, including 3 minutes in gameplay with a short pre and post game questionnaire. During this session you can pause and take a break at any time by informing myself when you would like to do so.

While you are evaluating the game, it is important to know I am not evaluating you, I am evaluating how you play the game. You can make no mistake; it is important to remember that the main focus here is to see how you interact with the game so that we can better improve it in future versions.

During the session, please be open and honest with your feedback, by vocalising what you are and are trying to do, challenges you are faced with and any glitches you may experience as this will support our playtest findings.

As you are the one playing the game, I won't be able to answer some questions you ask if they relate to 'how' to do a specific task – I will instead ask you how you think the task should be completed, again, supporting our findings for future iterations.

Constant communication is important to this playtesting process, without which we would be unable to capture the data required to improve this game. So, if you become quiet, I may prompt you with questions to keep talking.

From this moment, you are in control, feel free to play through as many times as needed.

Questions to ask during state mating

- What are you trying to accomplish?
- Why did you choose to do that?
- How did you accomplish that?
- What is your current goal?
- What is on your mind?

Questions to ask during for measuring enjoyment

- Does the game provide you with an interesting goal, choices and activities?
- Does the game hold your attention?
- In what ways could the game be improved to further engage you?

4.2 Pre-Playtest Questionnaire

Questions:

1. Have you ever played an endless runner?
2. Do you know many endless runner games?
3. On a scale of 1-10 how skilled do you consider yourself at fast paced games in this genre?

4.2.1 Results of Pre-Playtest Questionnaire: Tomohiro Nakayama

1. Yes
2. Minion Rush only
3. 8

4.2.2.1 Results of Pre-Playtest Questionnaire: Zachary Price

1. Yes
2. Temple run
3. 2

4.2.2.2 Results of Pre-Playtest Questionnaire: Zachary Price

4. Yes, I've played a few, mainly on mobile devices.
5. Off the top of my head, I know *Subway Surfers* and *Temple Run*.
6. Probably around 6 or 7.

4.2.3 Results of Pre-Playtest Questionnaire: Rebecca Cole

1. Yes
2. Temple run, minion rush
3. 6

4.2.4 Results of Pre-Playtest Questionnaire: Kittaya Kruapat

4. Yes
5. Temple run, Running Fred, Subway
6. 7

4.2.5 Results of Pre-Playtest Questionnaire: Daniel Crook

1. Yes.
2. Temple run, subway surfers, jetpack joyride, crossy road.
3. 9

4.3 Post-Playtest Questionnaire

Questions:

1. What did you like about the game?
2. Did you struggle at any point?
3. Was there anything unclear or confusing when you were playing the game?
4. Out of 10 how enjoyable was the game?
5. What was your favourite part about the game?
6. What was your least favourite part about the game?
7. Is there anything you think would make it more engaging?
8. How did you feel about the look of the game?
9. Is there any additional feedback or comments you have?

4.3.1 Results of Post-Playtest Questionnaire: Tomohiro Nakayama

1. I liked how simple the concept of the game
2. No struggles at any point
3. there were no unclear parts, the space bar for jumping was very intuitive
4. 8/10 enjoyable
5. I liked the parts where it would suddenly get faster
6. I think adding forks in the path we take could allow for more variety
7. I like the look of the game, the night-time skyline is a nice touch
8. No additional feedback
9. I enjoy endless runner type games so this game really felt fun for me.

4.3.2.1 Results of Post-Playtest Questionnaire: Zachary Price

1. I liked that the graphics weren't too distracting. The futuristic vibe worked really well, and it didn't constantly try to grab your attention with random pop-ups or banners. Instead, it kept you focused on doing the right thing. I also really liked the character animation, how the player moves feels realistic, like how I would react if I were actually jumping across skyscrapers.
2. No, I didn't have any struggles.
3. No, nothing was confusing.
4. A solid 8 out of 10, really enjoyable. I feel like jumping back in to try and beat my score.
5. The arcade-style gameplay and the fact that I could play it on a desktop. It's the kind of game I'd jump into between tasks to quickly try beating my high score.
6. Not really, there was nothing I disliked. But I would suggest adding a proper score system, where you can see your score after each run and also your high score. I wasn't keeping track of the score while playing, so having that info would give me something to aim for next time.
7. I'd love to see more obstacle types, maybe ones you could go under or through. A power-up system could be interesting too, especially something that lets you speed up or slow down as an advantage.
8. I really like the look and overall aesthetic of the game. The character design is simple and doesn't distract from the gameplay, unlike something like *Subway Surfers*, where the visuals sometimes take away from the experience. The world feels unique, I haven't seen anything quite like it.
9. No, I think I've covered everything.

4.3.2.2 Results of Post-Playtest Questionnaire: Zachary Price

1. It was easy to understand, especially the controls. They felt very natural and intuitive. If you've played any other desktop game, it feels familiar. The map and visuals were engaging, and everything was easy on the eyes and clear to follow.
2. I had trouble with the scrap pickups off to the side. It was hard to make those jumps. Other than that, the difficulty mostly came in when the game picked up speed. Timing jumps to get onto buildings became a bit tricky.
3. Not really. The only part that wasn't totally clear was the purpose of the scrap pieces off to the side. I wasn't sure if they were worth more or had a special use. If they were a different colour, it might help make that clearer and encourage players to go for them.
4. I'd give it a 7. That's mostly because of the glitches I came across, like the character not jumping when I tried to. I also didn't get the chance to use the slide mechanic, so I wasn't sure if or how it played a role in the game.
5. I liked how smooth and easy it was to play. You could jump right in without needing a tutorial. If you've played mobile or desktop games in this genre before, the controls feel instantly familiar. Even if it's your first time, it's easy to get the hang of it.
6. Getting stuck near the end because of a glitch. It felt like there was more of the game to experience, but I couldn't reach it. That was frustrating because I wanted to see what else was coming.
7. Introducing a few different obstacles earlier in the game would help. Right now, it starts off very straightforward with just jumps. Including the slide mechanic early on would help players learn all the controls from the beginning. Making the side scrap pieces stand out more, maybe by changing their colour, could make them more appealing. I also think reducing the size of the scrap could improve the visual balance a bit.
8. The aesthetics were really good overall. The background and buildings looked great with nice lighting and colour. I thought the robot and scrap pieces in the foreground were a bit large and overwhelming. If they were scaled down a little, it would give players a wider field of view and maybe reveal more of the alternate routes.
9. I'm mainly curious to see how the slide mechanic comes into play later. Other than that, I got the general idea of the game and found it enjoyable.

4.3.3 Results of Post-Playtest Questionnaire: Rebecca Cole

1. I liked when it got faster and it got challenging, and it made me want to try and keep going.
2. I struggled at some jumps, especially when the character started to glitch, and I also struggled when it got fast and when it was so fast that the player was completely jumping over buildings and I couldn't actually land on the platforms.
3. At the start on the very first jump when you go to the scrap and there's those vents, it's not obvious that that's a thing I'm meant to collect.
4. I would say the game is pretty enjoyable, about a 7. In its current stage I would give it a 5.
5. My favourite part was the idea of the game and the atmosphere in the city. Even though I didn't like how dark it was, I still like the robot running through the city. And I do like how in the levels you get faster and faster.
6. Probably the layout of the jumps, just how they were set up, for one part you just jump continuously.
7. If the visuals were better and if the scrap was more obvious or if there was more of a clear goal of why you needed the scrap and if there was an end goal like something for me to achieve and work towards.
8. Positively, I like it. I just think it could be done better, like more refined. I like the night time and the neon lights. I just think it could be done better.
9. No additional feedback and comments.

4.3.4 Results of Post-Playtest Questionnaire: Krittaya Kruapat

1. The music is really cool and fits the fast pace well. I also like how the fast-paced running kept me focused and engaged.
2. The jump timing felt tricky, and the collision with buildings made it hard to collect scraps.
3. Not really confusing, but the jump and collision felt a bit off, making collecting scraps harder.
4. 6/10. The speed is exciting but it could use more challenges or obstacles to keep it interesting.
5. The visual style and how the music dynamically increases in tempo, making the feel more focus and tension. The futuristic city design really stood out.
6. There is not much player's movement, only moving left, right, and jumping. Maybe adding more like such dashing, sliding, or special moves.
7. Add traps or hazards that can downgrade or slow you down, adding more challenge obstacles.
8. The visuals look amazing, I loved the colorful, futuristic city look, it feels like a sci-fi Tokyo and how the music speeds up, it really makes the game feel intense.
9. Longer levels or more obstacles as you upgrade would be great. When the speed increases, I wish the game pushed me to jump more, so it feels more challenging.

4.3.5 Results of Post-Playtest Questionnaire: Daniel Crook

1. I like the fast pace. Like when it got fast-paced, I appreciated that speed.
2. Yeah, so there were some times where the way it worked, you had to think about it a bit more, where you'd have to jump earlier. You landed in time to jump for the next one. Or it was just a bit congested, and the jumping at the end could have been better as it made you jump too deep.
3. It was a bit unintuitive, but I think it was fair enough. I think I just messed it up
4. Nothing in particular.
5. 7 - Yeah, I would say pretty enjoyable, maybe add different scenery.
6. I would say, like, climbing up layer after layer. I enjoyed the different elevation changes. I thought that was quite good. Definitely climbing up was pretty fun. And just the speed of it, yeah, I enjoyed the speed of it.
7. Yeah, a few things. Like, if there were moving obstacles, like you were getting shot at with a laser coming down the middle when you had to move out of the way of that. Or something that was coming towards you, maybe that you had to avoid, as well as that could make it more engaging.
8. It looks crisp, it looks modern. It's got that kind of punk Party City feel, I guess. I don't know what you'd call that, but I quite liked it, yeah. But could do with colour changing at some points.
9. The sideways movement doesn't look very natural. But apart from that, it's a good game.

4.4 Playtest Notes

4.4.1 Rebecca Cole Notes

- Had an overall positive approach to the game visually and mechanically.
- Didn't realise scrap was a pick-up and when it was collected that it didn't have a purpose.
- Experienced collision bugs such as jittering and being stuck on edges of the buildings.
- Felt the layout of the jumps needed adjusting to the player speed.
- Scene feels too dark in certain areas.
- Player animations didn't feel natural, e.g running speed to running animation didn't match.
- Didn't feel like there was a goal other than survive as long as you can.
- First jump feels confusing, failing multiple times before understanding the premise of the game.

4.4.2 Tomohiro Nakayama Notes

- Some background buildings disappeared midway through gameplay.
- Scrap objects disappeared at some point during the session.
- The player is getting stuck in or passing through objects.
- The player found basic actions easy to perform but tried to check if other actions were possible.
- It didn't take long to understand what needed to be done.
- The player liked the coloring of the building windows.
- The player liked the neon atmosphere at night.
- The player appreciated being able to jump higher by holding down the spacebar.

4.4.3.1 Zachary Price Notes

- Asked if arrow keys or 'W' key would affect movement
- Tried Shift key to speed up the player
- Thought visuals were appealing and futuristic
- Game was simple and not distracting
- Understood core goal (collecting scraps)
- Noted speed increased over time
- Experienced glitching through buildings
- Observed disappearing assets (scraps/buildings)
- Tried to click to glide - expected it to work
- Attempted to take alternate route between buildings
- Found controls intuitive despite lack of PC gaming experience
- Pressed 'W' key throughout even though it had no function
- Suggested a visible score/high score system
- Would like additional movement variation (ducking/sliding)
- Enjoyed the arcade pacing and desktop accessibility
- Gave game an 8/10 and had a desire to replay

4.4.3.2 Zachary Price Notes

- Player instinctively opened the instructions menu before starting.
- Controls were immediately understood and felt intuitive.
- Character got stuck behind a barrier during the first run.
- Player survived unexpectedly after landing on the edge of a building, which caused confusion.
- Game speed increased after upgrades, which the player noticed and understood.
- Slide mechanic triggered unexpectedly and surprised the player.
- Glitch around the 150 mark caused the robot to freeze mid-air and become unresponsive.
- Several jump inputs failed to register, especially at higher speeds.
- Player questioned if jumps only work from the center of buildings due to missed landings.
- Later confirmed jumps can be triggered from any part of a building platform.
- Slide mechanic wasn't clearly introduced or explained in early gameplay.
- Scrap located off to the side was hard to reach and difficult to return from.
- Alternate routes often had no follow-up platforms, causing repeated failed attempts.
- Thought the robot and scrap in the foreground were too large and could benefit from scaling down.
- Early section of the game felt too slow; suggested faster pace or early obstacle variety.
- Recommended enabling roll input while mid-air to allow quicker landings.
- General feedback was positive, but the experience was impacted by bugs and unclear mechanics.

4.4.4 Krittaya Kruapat Notes

- Explore through the instruction
- Couldn't go back to the instruction previous pages
- Confused about the Scraps
- Start the main game without problem
- Notice the upgrade but still unsure
- Pressing W key, even not affecting the movement
- After collecting 20 scraps, notice faster speed
- Feel upset when miss collecting scraps
- Between some platform no jumping is fine after speed up the player
- Feel focus while playing the game
- Need more challenge for the game
- Same pattern of the buildings
- Notice the music is faster
- Try to explore more function of the game
- Any other movements or keys need to be pressed?
- Using ESC key to pause the game rather than the UI button

4.4.5 Daniel Crook Notes

- Had an overall positive approach to the game's fast-paced style and visual appeal.
- Enjoyed the increase in speed and the challenge.
- Did not realise ESC could be used to access the pause menu until told.
- Found sideways movement unnatural.
- Experienced collision issues, including getting stuck behind objects and a known glitch that caused the player to be pushed back and the next building not to spawn correctly.
- Observed that some levels and building designs felt repetitive, with limited variation in obstacles and scenery.
- Did not prioritise scrap collection as its purpose was not fully clear focused more on distance than collecting scrap.
- Suggested introducing moving obstacles and more alternate paths to make gameplay more engaging.
- Found certain jump timings unintuitive, especially when needing to anticipate lower landings or avoid obstacles.
- Liked the elevation changes and climbing mechanics
- Rated the game a 7/10 for enjoyment but noted potential for more variety and polish.
- Mentioned that character design was basic and suggested adding cosmetic upgrades as a motivation for collecting scrap.
- Felt the game's overall aesthetic was crisp and modern but would like to see color variation and more dynamic scenery as the player progresses.

4.5 Proof Of Playtesting

4.5.1 Rebecca Cole

https://drive.google.com/file/d/1f1JFu-Alyj_1mCy-ASf4-4wr_st1cOMk/view?usp=sharing

4.5.2 Tomohiro Nakayama

<https://vimeo.com/1079728033>

4.5.3.1 Zachary Price

<https://www.youtube.com/watch?v=qdCPXFp2Aqg>

4.5.3.2 Zachary Price

https://www.youtube.com/watch?v=_D3tY24IzmY

4.5.4 Krittaya Kruapat

https://youtu.be/x6E8skQb_LU

4.5.5 Daniel Crook

<https://youtu.be/-gkTYj-yoII>

5.0 Game Screenshots

