



## **Monolith**

A Game Built on Unruly Challenges within the Act of Cooking

Request for Proposal

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## Document History

Version	When	Who	What
1.0	09/16/2023	Mauricio Rodriguez, Ibrahim Mansour, Jennie Tafoya, Khadeeja Mansour, Bibek Sharma, Alex Mackimmie, Jaya Krishna	Initial drafting

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## ***1.0 Problem Description***

Cooking skills have steadily declined over the past few decades, leaving many unable to provide food for themselves due simply to their inability to prepare meals. MAKI Studios is seeking a solution to this, with an edge in restaurant development, in a fun and interactive way. We are confident that a strategy game combined with a time-pressured element will push people to develop the skills necessary to sustain nutrition. Strategy and time management games have been known to develop new skills and build problem-solving abilities. Since their inception in the 90's and early 2000's, time management and strategy games have garnered massive popularity. Their encouragement of critical thinking and problem-solving sharpened the minds of users and introduced new skill sets. MAKI Studios believes that the skill-building found in strategy games can alleviate the lack of food preparation knowledge and experience, enlightening players with the ability to prepare. The time it takes to cook is a leading contributor to the lack of autonomous food preparation. A game that equips players with the ability to hash out meals in a tight space of time will instill the evidence and skills that players need to make cooking a doable reality within their time budget.

With new technologies made widely available such as Unity, our company sees a massive opportunity to profit. Games can be made easier and smaller teams are capable of producing larger, more complex software. Instead of making the exact same game of the past, changes can be made to create a new and improved modern version of the popular time management and strategy games.

MAKI Studios came up with Monolith. A fun and modern take on a time management and strategy cooking game, this game is single-player and requires the user to seat customers, get their order, and deliver it to them in a timely manner. As the game goes on, the player will get customers coming in quicker and possibly having less patience. The player will have to think about which customers to serve first in order to make it through the work day and collect the most money. Our team believes the market for games like these is only growing and if we can introduce a modern take on some of these classics, MAKI Studios can produce a lot of profit as consumers around the country learn to be comfortable cooking again.

## **2.0 Project Objectives**

The main objective for us is to contract somebody to make our vision for an interactive game set in a dining environment similar to games such as Diner Dash and Overcooked. The objective of the game is to serve customers by taking in their order and sending their food out to them. As the player progresses through the game, the difficulty of the game should increase. The features we require for such a project are:

- Player character
  - The player character will interact with three main things in the game:
    - The customers: The player must collect the customers' orders and subsequently cook those orders to satisfy the customers' needs.
    - The tables: The player can interact with the table by placing the customers' food there.
    - The kitchen: Here, the player will cook the food for the customer. They must keep an eye on it making sure it does not burn. In the same kitchen, the player will take the dishes from the table and wash them here.
  - The player is in charge of many tasks in this game and should be able to move freely in order to get these tasks done.
- Customer Character:
  - The customer character will have a patience bar that shows how frustrated they are from waiting. We'll have animation queues and sounds to alert the player they're getting upset.
  - They also are able to be seated by the person playing the game.
  - The customers are also going to be able to leave if they get frustrated enough.
- UI/Menu
  - The menu has to allow the player to pause the game and either exit or resume the game.

- The U/I while playing the game has to tell the player their score and what level they're on.
- Audio:
  - There should be music playing in the background while the player is playing the game.
  - There should also be sound effects for customers getting frustrated that way if the player is in the kitchen the player knows there's an angry customer.
  - The same thing with burning food there should be an indication that the food is being overcooked and if the player ignores that there should be a sound that the food burned.
- Level System:
  - The game should have a level system where as the level increases the difficulty of getting things done gets difficult. This way as the player gets more comfortable and challenged as they progress.
- Points:
  - The player will earn points from getting the food out on time to the customers. These points will help reach the winning goal to complete the level.

### ***3.0 Current System(s) – if any or similar systems***

The cooking game genre has lots of examples that we hope to build upon with our own vision. Overcooked 1 and 2, Diner Dash, and PlateUp! are all examples of the genre of game Monolith aspires to be modelled after.

#### **Overcooked 1 / 2 - Steam App, Nintendo Shop, Playstation Store, Microsoft Store, etc.**

Developed by Team17 in 2016 and 2018, Overcooked 1 and 2 are cooperative multiplayer cooking games where players are challenged to coordinate their efforts in the kitchen and complete recipes by following a set of simple steps. Players must prep, cook, and deliver food orders on time to succeed. Players also need to collect dirty dishes and clean them to continue plating new dishes. However, the different levels in the game continue to push players to the

limit of their abilities by making kitchen layouts that provide new challenges. Sometimes, the challenge comes in the form of working with the other players.

#### Key Features

- Campaign that can be played cooperatively with 1-4 players
- Scoring system based on time and meals prepped
- Unlockable and secret bonus stages
- Unlockable chef skins
- Achievements (Supported Platforms)
- Many recipes to master
- Large stage variety with different themes and obstacles

#### **Diner Dash** - PC/Mac Online / Downloadable, Playstation Store, Microsoft Store, etc.

Developed by PlayFirst, Glu Mobile, Gamelab, Hudson Soft, Coresoft in 2003, Diner Dash sees the player working at a restaurant serving customers. Gameplay is centered around strategically seating and taking the orders of customers. Once this is complete, the player must deliver the order to the kitchen and, when the order is ready, take the food to the correct tables. After the food is finished, the player must bring the table a check. The player can then collect the check and tip left by the customers and must clear the table before the next customers can be seated. There are many more actions the player can take to help keep customers happy, such as bringing them drinks or talking to them. The game is organized by level. Levels are passed by earning enough money/points to clear the level. The game includes expert mode on levels for added challenge. Diner Dash also includes an “endless shift” mode where the player must survive as long as possible in a single level.

#### Key Features:

- Single player campaign game
- Combo system to increase points on stages
- Scaling difficulty
- Multiple chapters and levels
- Optional difficulties and endless mode

#### **PlateUp!** - Steam App, Nintendo Shop, Playstation Store, Microsoft Store

Developed by It's happening in 2022, PlateUp! is a cooperative multiplayer or singleplayer roguelite restaurant management game that has the player physically build, manage, expand, and operate a restaurant. This game has the player open for business, serve customers, prepare food, clean dishes and tables, and close the restaurant. Then, the player has to choose how earnings are spent to expand the restaurant and keep customers coming back. Earnings can also be used to expand the restaurant and its efficiency. Perks are gathered during a playthrough that can affect gameplay such as "customers are more patient". These perks and the way the players spend earnings will lead to victory.

#### Key Features:

- Roguelite experience and progression. Losing means starting over but there are unlockables
- Players design, develop, and choose dishes for their own restaurant
- Many entrees, sides, sauces, toppings, desserts, and appetizers to choose from
- Manage both the kitchen and front of house
- Expand to new locations and franchise your business
- Upgrade and rearrange the restaurant layout during gameplay
- Many options. Lots of replayability

#### ***4.0 Intended users and their interaction with the system***

Everyone who loves strategy and time management games but wants a little more is our intended user. The user needs to download, launch, and learn the basic rules of our game. Once the user is fully prepared, they will serve as many customers as they can until they can't keep up with all the orders. The game will get progressively more difficult to complete as time goes on, and the user will have to plan for that.

#### Users

- People who enjoy time management and strategy games

#### Uses

- Get that nostalgic feeling and pass some time
- Challenge friends or your own previous scores
- Improve your reaction time while having fun

## ***5.0 Known interactions with other systems inside/outside of the client organization***

### Distribution Platforms

- Steam
- Epic Games Launcher
- Nintendo Shop
- Playstation Store
- Microsoft Store (PC / Xbox Platforms)
- Apple App Store

## ***6.0 Known constraints to development***

- Physics Engine Challenges: Ensuring precise player movement and realistic physical simulations like gravity and jump height can be complex.
- Optimizing Platformer Performance: Achieving smooth gameplay by optimizing rendering, physics, and resource usage
- Responsive Character Controller Challenge: Designing a character controller that feels responsive and accurate to player input
- Camera Management with the Player: Developing a camera system that follows the player smoothly and provides the right perspective
- Essential Playtesting for Balance: Rigorous testing and iteration to balance difficulty, pacing, and overall gameplay experience
- Time-consuming level design: Creating detailed and engaging platformer levels can be time-intensive



## 7.0 Project Schedule

Date	Description
9/14/23	RFP due
9/16/23	Champion document, class diagram, and sequence diagram due
9/17/23	Meeting: prepare for SA presentation
9/19/23	SA PowerPoint presentation and storyboard due
9/28/23	Begin coding after all SA components are complete
11/05/23	Meeting: check if all code is close to being complete
11/12/23	All individual code needs to be complete and run as a whole
11/21/23	Work on final clean up of project
11/28/23	Meeting: prepare for final demo
12/7/23	Final Demo

## 8.0 How to Submit Proposals

We are eager to invite you to submit your innovative proposals to us, as we strongly believe that your contributions would be a great asset during this collaborative phase. To streamline the process, we kindly request that you forward your proposals in PDF format to our dedicated **Mauricio Rodriguez** ([rodr8431@vandals.uidaho.edu](mailto:rodr8431@vandals.uidaho.edu)).

Should you have any queries or require further clarification, please do not hesitate to contact 208-749-6684. We assure you that all inquiries will be meticulously documented and disseminated to all applicants to foster transparency and collaboration throughout this process.

We eagerly anticipate the prospect of collaborating with you and are here to assist you in any way possible during your proposal preparation.

Thank you for considering this opportunity. We look forward to receiving your submission.

## ***9.0 Dates***

We are thrilled at the prospect of witnessing the innovative proposals you have to offer. To ensure a smooth and successful submission process, we kindly remind you of the upcoming critical deadlines.

- **Proposal Submission Deadline:** Please make certain to submit your proposal by 12:00 PM PST on December 7th, 2023. This will allow ample time for a comprehensive review of all submissions.
- **Notification of Decision:** We value your effort and commitment, and we aim to maintain transparency throughout this process. All applicants will be informed of our decisions by 5:00 PM PST on December 14th, 2023.

## ***10.0 Glossary of terms***

**Animation queues** - the animation of the non-player characters and game objects as they build up, or add up in quantity, in regards to the progression of the game

**Campaign game** - a game in which the objective requires the player to go through a series of tasks in a certain environment order to complete it

**Combo system** - multiple items or perks being obtained or used

**Cooperative multiplayer** - a gaming environment where two or more players can play and interact with each other, usually to achieve the same or similar goals

**Customer character** - One of the multitude of non-player characters that will appear in the game, possessing their own changing facial expressions, attitudes, and feelings that the player character will be responsible for keeping happy and satisfied, simulating the clientele a business would receive in real life

**Earnings** - the money for the restaurant in which the player earns through their work

**Franchise** - a business owned by a particular individual but leased from the original company

**Menu** - the list of in-game palate, or dishes, being served in-game

**Money** - the currency by which the in-game restaurant runs off of

**Optimizing** - making the most out of a situation by creating the best possible flow of a certain desired action or process

**Patience bar** - a visual of the amount of patience a customer has left, responsibility falling on the player to keep sustained

**Player character** - The main character of the game that is controlled by the player, simulating a restaurant employee

**Perks** - extra benefits in-game that the player can collect to make the gaming environment more enjoyable and easier to navigate, usually obtained after reaching a certain point or milestone within the game i.e. a reward after some in-game hard work

**Physics engine** - the system in which the game is built off the acknowledgement of physics as they would apply in real life

**Points** - a tangible quantity being used to measure the rewarding system in-game based off of how many achievements the player accomplishes

**Replayability** - the ability to return to a certain level and play it again, potentially for more points

**Roguelite** - role-playing game that simulates a dungeon crawl, permanent death, and levels that generate in a procession that is based off moves that player had made during gameplay

**Scaling difficulty** - a game that varies in its difficulty, generally reaching higher in difficulty as the game continues on

**Singleplayer** - a game that is set up for the use of one player

**Skins** - unique and customizable looks to a character that the player can unlock or obtain

**Sounds (animation)** - the sound effects being played as character or object animation occurs in-game

**Supported platforms** - gaming platforms that players can experience the game through, usually dependent on the device and the software it can handle, i.e. Android/Apple, PC/controller-based systems

**System** - a variety of components that make up a certain element of the game that would typically be revised

**U/I** - acronym for user interface, being an interactive visual platform by which the player is able to see and interact with to see a response