

Arc Mastermind

How did you hear about epic games grant:

I have worked in Unreal Engine for a while now and had heard about people receiving grants from Epic Games in the past. I was waiting until I had the perfect project for this opportunity, and I finally have it.

Elevator Pitch:

Each player is a warrior who can personalize themselves with deep character, weapon, and fighting style customization. Allowing the player to truly represent their in-game personality through their champion. Or soon-to-be champion, as you must start off from the bottom as a hopeless fighter of course. By building decks of attacks and abilities in the form of 'cards', prepare for each duel by setting the order in which these 'cards' occur in the fight. Each and every fight is a glorious, choreographed, pixel art battle like seen in no other video game. Smooth animations, connected with randomness, bring a unique feeling to each and every fight. This player-predetermined brawl is filled with particles and beautiful colors magnificently exhibiting their tailored warrior in battle. Not only are you playing a game, but creating a masterpiece of a duel.

Full Project Details:

While the elevator pitch sounds like a bunch of pipe dreams, this project's focus is on customization and feel. The gameplay loop is built to be easy enough for anyone to pick up and this is done by having an extremely simple core game loop. Collect cards that represent different attacks, movements, and abilities you can perform in battle, and select the order in which you want them to happen. The structure of the core game loop is nearing completion(minus multiplayer) and currently holds placeholder assets. Having the gameplay so close to completion means this is the perfect opportunity for this project to display the Unreal Engine's ability to combine 2D and 3D art using PaperZD. Besides multiplayer, if given this generous grant, it will go towards three pillars. Deep Customization, Wondrous Art, and Stunning Sound Design will create an attractive game that could only previously be dreamed of.

Using a steampunk theme, the main scene is where the player will customize their fighter as well as their deck to suit their desired play style. Players can equip weapons that their attack cards will use. These weapons, as well as ability cards and cosmetics, can be rewarded by hitting milestones or from the morning gifts. Although the player has to get up after their alarm in order to collect these gifts, and the longer it takes to collect them, the less valuable the item will be. This is a unique mechanic to encourage players to wake up after their alarm. This is how they will receive a lot of necessary items in the game.

Slotting six of these cards into a device in an order you appoint will commence a fight between you and another player. As each card is slotted in, its corresponding animation plays in a tube located above each slot. Each of the six animations is played in order at the same time as the other player. Although this fight will differ from the normal perception of a pixel character fight as the event will play like a choreographed movie set by the player. Most games will use an

animation that feels responsive, which in 2d games means that a lot of the action of swinging a sword is lost. By including these frames, and adding randomness between the different actions set by the player, each fight can be alluring and unique. Each detail from unsheathing the sword to returning back to a fighting stance after swinging will be animated. When the final animation ends, the player who has taken the most damage will collapse. Stringing these wins in a row will grant you rewards at different milestones.

The preparation scene is where the player is randomly given cards from the deck they have created, and they must create the best attack plan they can with the cards given to them. After customizing your character to your exact needs, and selecting your favorite weapon. You can now decide exactly how your fighter will move in the upcoming battle. Create your own strategies to beat out your opponents. Using a ranged attack after creating space with a backup card, or armoring up before using many attack cards in a row is just a couple of creative strategies players can invent.

The fight scene is where two players clash. This fight consists of six stages. In each stage, both characters will play their respective animations. Unless one of the cards is marked as 'first strike' (an example card would be a dodge or block), they will play at the same time. One character may have chosen to attack in this stage, and hopefully, the other player chose to block, dodge, jump, counter, or heal. Making each stage an exciting, complex game of rock-paper-scissors.

Continue fighting players until you run out of cards in your deck or surpass a predetermined amount of victories. Certain cards like potions and armor-ups are consumable, so a destroy particle animation will play once you put them into the slot during the preparation scene. While your non-consumable cards will 'lose battery power' and have to be slotted out and recharged after your fights in a small minigame. While you do not have to play this minigame right after the fight, you will not be able to use the card until it is charged.

You will be able to collect these consumable cards from the morning gifts. After the players' alarm goes off, they have a predetermined amount of time to collect the package in-game. This unique mechanic aims to give players that extra push in the morning to get out of bed. If you fail to collect this package before the time limit, it will slowly degrade with the amount of time it takes for the player to access it. Although this project will not force a good sleeping schedule upon you. The user can set the alarm to go off at any time of morning, day, or night. So those who do not wish to log on during the morning, do not have to.

String wins in a row to reach different set milestones that will reward the player with more cards or weapons. To add another level of urgency to get wins in a row, this stat will always show next to the opponent's name, and there will be a global leaderboard to keep track of who has the longest streak.

This project's core gameplay loop is nearing completion. I have been working on the prototypes in Unreal Engine 5.1 and have begun an alpha version of the preparation scene so that I can show investors and my followers a more clear vision of what the final product could stem from.

Where the project is now

The current functionality of the core gameplay loop is nearing completion. Currently, the player will be shown cards from the deck list, The player can drag these cards around the scene, and letting go will cause the card to fly back to its original position. If the player drags the card over to one of the slots, a satisfying animation will play and the card will slot into the device. An animation of the character performing the action on the card plays in a tube above the slot. Each card has its own information that is sent to the device when it is slotted in. The order of the animations to be played is saved in the order the player chose to place the cards. Once all six cards have been slotted in, the fight scene starts and the animation information is given to the first player. The character runs through the predetermined animations, attacking an enemy. The player is then brought back to the preparation scene, completing the basic game loop. There are currently 10 attack cards to complete a minimum viable set of moves. With polishing, this project can be a simple, entertaining, auto battler. Although my dreams for this project go much further.

WHY ME

I am Toby Prosser, a game developer with a bachelor's degree in Game programming and development and successful launches on the app store. I am also a content creator with a following spanning over 40,000 followers solely discussing game design concepts/prototypes/mobile games. I will use this to my advantage and purpose my platform to promote Arc Mastermind. I plan to migrate this PC game to mobile as well as the Nintendo Switch in the future. The mobile version will be free, while the PC version is pay-to-play. I can turn this project into an auto battler like no other. With a fairly simple game loop, this grant will help me bring depth into the customization of characters and fighting styles. The utmost attention will be paid to allowing players to bond with their fighters, making their character, in a way, an in-game representation of themselves. With the prototype of the basic game loop nearing completion, this project is in the optimal position to receive funding. No time will be wasted because no work will have to be erased.

The goal of this project is to have a simple enough gameplay loop for all ages to get a handle of, and to become a game that users open while multitasking, or just for one round while waiting in line. Although the gameplay loop is easy to understand, I want to use that opportunity to give the players as much customization as possible.

I truly believe this project can be an amazing demonstration of Unreal Engines' ability to combine the art of 3d and 2d assets using PaperZD. I want to be able to bring on artists who can push the boundaries of what people believe games with 2d characters can feel like. While I handle the 'front end' of the game, I would like to contract a backend developer to refine the multiplayer aspect of the game, to insure it works seamlessly. Finally, I would like to make sure that the sound design is as captivating as the visuals.

I have also been working on a blog that follows all the progress of this project, and I plan to create higher-quality content for Youtube and Reddit. I understand how important social media

is for game designers in today's environment and plan to use it to its full extent to help with the success of this project.

See my Blog/Portfolio here: <https://www.tobyeprosser.com>

Unique Features:

This game uses the paper2D plugin to beautifully combine 3D and 2D game elements. With the twist of having the usual 2D cards be made into 3D assets, and have the fighters being 2D sprites. This combination brings life to what would be a classic card game. The project also aims to help people like myself with their sleeping schedule, convincing people to get up at the sound of the alarm, excited to pick up their daily gift. Arc Mastermind is built to be played while multitasking, watching movies or tv, while still being fun and engaging. Selecting your moves up front brings the player in, but allows them to pause at any point they want to, and they can come back as soon as they are ready. I love being able to play a game while watching content on my second monitor. Arc Masterminds aims to be the best in this category of games.

How do you plan to use the funds:

While I am an admirable game designer, I am not an incredible artist or astonishing sound Engineer. My talent is in recognizing and utilizing others' skills that surpass mine. My next step if I receive the grant would be to contract two pixel artists to work on two different characters in a similar style, one character more masculine and the other feminine. While they work on the art I will work on making the core gameplay loop to make it as satisfying to play as possible. Ensuring every minute detail of the small gameplay loop hits the spot just right. After receiving the art and implementing it, I will take time to assess where funds should go based on the success of the first two characters. From there, a minimum viable product will be made, so that we are constantly deepening and improving a product that can be released. The first MVP will not include multiplayer, assuming the feedback on the first model is good, multiplayer will be the next spend. While I have dabbled with multiplayer, I would have an experienced engineer make the backend as reliable as possible. Once I am happy with where the project is, I will work on a system to make the predesigned characters as customizable as possible, and create special moves that can only be used by specific categories of fighters. After creating a spreadsheet of all the new animations, character styles, and sound effects, I will organize it from most important to least important. I will use the remaining grant money to get as far down this list as possible. Everything I have built so far and will continue to build is based on a template format with different simple variables. Because of the simplicity of the game, adding more move sets can be streamlined and completed by adding new elements to arrays and changing variables.

Releasing a project like Arc Masterminds has been a dream of mine from even before I started the process of earning my Bachelor's in Game Programming and Development. Since I was creating small mobile games for the app store, teaching myself from Youtube videos. I have

dreamed of having the funding to work on my project full-time and hire artists to make my ideas pop. My goal is to create my own Indie Game Studio using Unreal Engine as our engine of choice. The money from this grant would go towards hiring a pixel artist to create animations for the fighters, a sound engineer, and finally a backend engineer. Although the most essential thing this grant would do is allow me to have the dream job I've wanted since I was sixteen. Even though this project is not open source, all tools created in the production of this game will be released for free after the game has launched to help support the solo game developers. I already have the hardware and knowledge of Unreal Engine from taking my four-year degree to complete this project, I just need the funds to make this venture one I can put all of my time into. I am so excited to see what this grant could do to my prototype. I would be able to expand on the characters, allowing for deeper customization in fighting styles, abilities, and cosmetics. I can complete this game by myself with a grant of \$5,000, although I have so many great ideas for this game. The thought of being able to receive \$50,000 and create one of the most addictive and elegant games of its kind is too enticing not to ask for. The prototype for the basic gameplay loop is almost complete, because of this, I am confident I can create a minimum viable product without much backing, meaning all extra funds I receive will go toward enriching the base game. For this reason, this is not an all-or-nothing request, any help would be extremely appreciated. With 5,000 I would do a much larger portion of the work myself, and hire freelancers to do basic animations and basic multiplayer capabilities. Then if the game at its base has success, I would continue to expand it with new fighters and abilities with the money earned from the project. I want to create a game people will remember to cement my name in the gaming industry and inch closer to my goal of running my own studio.

If I receive the \$50,000 grant, the game will be released with multiple types of fighters with multiple types of abilities, along with a solid backend and stunning visuals. I want to be able to show the capabilities of PaperZD and the Unreal Engine's 2d rendering capabilities by hiring an experienced pixel artist. I would also allocate some of the grant money towards paying streamers who play similar games(Magic The Gathering, Super Auto Pets), to play Arc Mastermind on stream.

I have set my phone's wallpaper to a note that reads "It's Mega Grant Week. This is your opportunity to start showing everyone how much potential you have. Get a grant! We got this!". I have so many people that believe in me, I want to show them that they put their beliefs in the right person and show them just how successful I can be. Throughout my life I have heard, work hard and you will find success; Since I graduated in the third quarter of 2022, I have been trying to find something to put my heart into. I've been struggling to find my place in the industry, but fully believe this is the project that helps me find my place in that industry. For me, this is not just some money to complete a project I am working on. This is a start to a new life, a new journey that I am ready to take on. I want to put my heart and soul into this project because I believe it can change my life and help me become the person I want to be while giving many others enjoyment on the way.