

Project Pipeline Proposal

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This document provides a detailed description of the proposed pipeline to help create a more efficient dev team in the future. It seems that we have had really skilled team members in the past, but the readability and insight for previous projects/resources is limited. Often we find ourselves redoing or re-learning several technologies as we gain new team members. This will allow us to train new team members quicker, take less time understanding a previous project, expand our resources and skill sets (as a team and not just individually), and generate resources for other GIMM students and really be the “tip of the spear” of GIMM.
“””

A. Pre-Production (w/ Clients)

1. Who?

- a. Who are our clients?
 - i. This is important to know as clients with different backgrounds will have different priorities and audiences to please.
- b. Who is this for?
 - i. Another important question. This will handle the audience questions and help us design a product with those people in mind. This will help with end of project UX

2. What?

- a. What is the product?
 - i. This conversation will allow us to determine an MVP and what their target goals are. This is the semantics of the project and will directly influence the technical stuff.¹

3. When?

- a. When is this project due?
 - i. Having a more concrete timeline will create urgency when needed. This should be fluid if need be, but should be concrete. With our structure we may entertain 2 different timelines. What is the client’s timeline and what is our timeline? Since we have other projects coming in, we may want to get it done quicker, but we may entertain a budget oriented timeline.²

4. Where?

- a. At the end of the day, where is this project going to be situated?
 - i. This is a very important question. Answering this question will allow for the ending parts of the project to be handled quicker and more efficiently.

¹ What: We will have to come back to this step after the next set of pre-productions.

² When: Based on the wireframe and semantics of what we are doing, we may need to address or cut things from “what”

Depending on the project this might be on... AWS? App Store? Oculus Store? etc. Are we hosting? (This should add cost) Or are we “handing off.”

5. Why?

- a. Why does this project exist? Why does this project need to be done?
- b. Understanding “why” this project needs to be done will help us ideate and understand the project more. This is more of a conceptual understanding and shouldn’t take long. What is the need here?

B. Pre-Production

How?

Now that we have all of our necessary information, we can start planning the project. There are several things we need to address before we get into the project.

- Who is going to be on this project?
 - Allocate team members to this project. Depending on the project details, we may need more programmers than artists or vice versa.
- Our UX designer should have all the necessary information to begin creating a wireframe. We will revisit the “What” and “When” from the previous discussion.
 - Ideally, we can iterate through a design 2-3 times. This would be about a 6-8 day process, so 2 weeks in summer or 2 months in school semester. This hurts the timeline, but this would allow for more efficiency in the long run.
- After the first or second interaction of the design, the technical team can begin to set up the template. At this point, the project is officially underway. If we have a template setup, this process will be very quick and will allow for new team members to learn quickly. If we do not have a template in place, then we may take extra time to set one up for the future.

C. Production

We have a strong experience base for websites, AR projects (Android/iOS), VR projects (Quest/Rift) - we should have templates or clear game plans when working on these projects. With updated documentation and capacity for training, we will be able to jump on current or new projects more efficiently.

The system I, Brandon, has setup is a kanban style board on Trello. These “lists” will function simply as “Design - Backlog - Todo - Doing - Review (code/art) - Done (Implemented).” The

template should handle a lot of the pre-production and “setup” and once the UX wireframe has been established and finalized, we can create all the necessary cards in the “Design” list. From here, we can create a laundry list of tasks that will be put into the “Backlog” list. The Program Manager/Project Manager will determine priorities and move tasks to the “Todo” list. From here, individual workers will either self-assign or be assigned tasks in the “Todo” list and move the card into the “Doing” list. Once the task is done, the worker will move the task to the “Review” list and assign the presiding manager (art or code) to review. The reviewer will either implement the change, assess and approve the implementation, or assign a new person (or old) to implement the changes into production. Once the product is in production (main or pushed to live server), they will move the card to done.

Since ideally we will have one board for a project, there may be a lot of cards. There are some neat organizational stuff that can help. We can have colors associated with certain cards that can represent artists or coders or whatever. We can also assign tasks and people can temporarily filter cards to only have their tasks show (error prone if not careful!).

This style may change overtime, but having some structure versus none will be more beneficial overall. New program managers may learn this style to best learn the role then venture to new ideologies/strategies as the team and projects change.

D. Post-Productions

All done?

This step is where most dev team members feel we skip or spend less time on. This is what will really help us make sure our product is finished and ready for production. The major benefit of utilizing this step is a more polished product and better portfolio artifacts for GIMM Works and the individual workers. The only benefit is time and thus money. If we are able to be efficient with our production step, this should not be too much of a worry, especially if we plan for this in pre-production.

What will this entail?

- User Research
 - Ideally, our UX team member(s) will handle testing the product. Testing outside of the development team will allow us to fix things we may not have seen. They will be able to provide feedback and address issues we did not think of or anticipate when in pre-production. To some degree, this may be outside of scope. We should entertain planning for this on our timeline, but if the results are vastly

superfluous or outside of scope, then we may have a “invest in this fix” sort of mentality.

- Along with external testing, we need to make sure everything passes the eye-test. Does this product look good? or just “fine”? If we aren’t proud of what we made, we should make some adjustments. We should handle this in production/templates, but little things like settings for audio and mouse sensitivity are just little touches that makes things feel more complete and less “proof of concept” (The actual proof of concept situation should be addressed in the pre-production with clients phase)
- Documentation
 - This step is vital for showcasing our work as well as ease of use for training new people on old projects or revisiting the project. All code should be well documented and the project overview should explain every decision well. Any resources of how we did certain things (technical) should be available here as well. Ideally, the resources are not just posted, but documentation on how to use resources is available here, so that re-learning this resources is efficient.
- Publishing
 - Based on the previous conversation of “where” this product will go, we will have to handle publishing if we are not handing the product off. For new territory like the Oculus Quest store, we will have to figure out a system. The App Store is less unfamiliar, but ideally we can find a reliable system for this (IE not use Ryna’s account forever). AWS will come with maintenance costs and the App Stores may need us to update to the latest version systems to keep up and running.
- Promotions
 - After our main website is complete, we should be thoroughly documenting the process and the product on our personal page.
 - Video - We should create two videos for each project (if applicable)
 - Promotional: We should create a demo video that showcases the gameplay/product in a good light. Really utilize what we learned in Ted’s video production class. This video should be used on our personal website/YouTube for ease of showcase/passive showcase. If the client wants or needs it, this video should be given to the client to use freely.
 - DevLog: We should create a dev log style video that will showcase individual team members’ experience and roles on a project. This should be hosted on our personal website/YouTube and also used by team members freely.

E. Revisiting Projects

Revisiting a project seems inevitable at this point. This isn't really a new step, but more so an explanation of how we might more efficiently revisit projects. We would take into account steps A-D, but really emphasize the documentation step. We will be able to understand what is going on quicker with better documentation. This is why the documentation step is so vital. New team members are bound to train or revisit certain projects, so documentation will make this process quicker.

F. Tools & Resources

This is also not really a step in the process, but a place to talk about what tools we may use in our process.

Organizational system should include Trello and Github. Version control will have a separate document to cover, but ALL of our projects should be housed on Github. Current projects should be organized on Trello (at end of project, archive the board).

Development tools will be what we know: Adobe Creative Cloud (Photoshop, Illustrator, After Effects, Premiere, Lightroom...), Unity³ (Mobile/Game/VR/AR development), Visual Studio/VS Code (preference), Discord (communication), Xcode (iOS development)

Specific resources like "how to use..." should be well documented, resourced out (YouTube tutorials), and posted on our website AND in the google drive. This should include: (Brandon will develop) "How we use Github with Unity" and "How to use our Rokoko Motion Capture Suits". Ideally, we can greatly increase the resources here for internal use to make work more efficient when we reuse certain technology. This will greatly benefit the GIMM students as these resources will be readily available to them. We should work with the professors to pad some of these things which may aid class so that they can get into more advanced topics quicker while not outsourcing education to random YouTube resources.

³ We should have a set version at the start of every school year/semester (organized with Jeanne). Managing multiple versions from different GIMM classes/work is really annoying.