## Component Design and Integration Plan

1. **Determine the required programming systems and components.**

*Analyse and evaluate the functionality required by the project to determine the components and systems that need to be created.*

* Summarise game concept: clearly declare what considerations need to make for components
* Components: nodes, battle system, health display,
* Purpose of components, what do they do?
* Provide brief summary of purpose

Feral Kingdom will be a Pokémon-esque turn based combat game with an overworld to move between battles, the player will be able to complete a battle either by killing the opposing monster in the battle or by running away from the battle, the latter will not be marked as a win state, and thus the player would have to come back and complete the fight to be able to beat the game. Considerations need to be made with the monster components as to how the enemies and player take damage and deal damage to allow the system to be reused for each monster type to make each monster’s play style be unique from the others.

1. **Document your process for analysing, evaluating, sourcing, and selecting components.**
   1. *Analyse the functionality required by each component.*
   2. *Evaluate possible designs for each component.*
   3. *Source various references or third-party resources for each component.*
   4. *Compare the possible design solutions for each component and select the most appropriate solution for the project.*

* Describe what the component does and how it functions
* Ways of implementation, Original, new, potentially
* Resources to help design components, tutorials, guides, articles, how they help create the component
* Select the implementation method, describe why its suitable, compare new implementation against old.

1. **Evaluate the technical impact of each component on the overall design of the project.**

*Consider how the components will impact on the overall design of the project. Address how the components will be integrated into the project with consideration for the software being used in the development pipeline.*

* Outline when, how, why, what they communicate with, when they make the connections (references made, find components etc.) and reason they make this connection

1. **Create a domain model for the overall project detailing how each component/system responds to one another and their flow of data.**

*Insert a picture of your domain model for your project. Ensure you specifically outline the data that each component sends and receives.*

* *How everything is connected*

1. **Address the cost of implementing each of the components.**

*Using the three-point estimation formula, determine the estimated time that each component will take to implement into the project to achieve the correct functionality required by the overall project. Explain the elements of development taken into consideration that were used to determine your optimistic, pessimistic, and most likely estimations for each component’s calculation.*

* Apply to production cycle as whole, not individual components
* Provide overview of pessimistic, optimistic, realistic scenarios, how long components construction will take according to each scenario
* How long, times by the avg wage of a software dev, Hours just sitting at comp,
* List time for each components and implementation time

1. **Address any possible licensing issues in regard to third party components or scripts being used.**

*Identify and explain any possible licensing issues that may arise in relation to third party components or scripts being used, or code used from any external resources (such as tutorials, public repositories, asset stores, etc.).*

* List third party assets used,
* Address third party assets and their licensing
* Explain the ‘Fair Use’ of tutorials