

# Game title & logo

Pre-production Documents

<Author>

<graphic of company logo. You can layout this page in whatever way you like>

## **Guidance Notes <<delete this page when you submit your work>>**

The pre-production documents encapsulate what you need to consider in order to complete your AGP.

Please note that in the “real world” each of these sections would form their own separate documentation, but for ease of marking you are providing them in one document. One of the things you will notice is that you invariably end up repeating key wording/ concepts in each separate section. It is okay to do this.

The intention of these documents is for you to:

- 1) Collect all of your thoughts in one place and present them in a manner that will help others understand your project (publishing team and your freelancers).
- 2) Carefully consider all aspects of production so that you can plan for the year ahead
- 3) Explain clearly to the publishing team, what you are intending to do so that you can get useful and relevant feedback
- 4) Put your USPs at the forefront of your thinking and help you build your USPs into all facets of production

Your AGP should be a complete game (rather than a portion of a bigger game) and should be small enough in scope that it can be realised effectively by May 2014.

Care should be taken to replace all text provided in this template with your own text. And, you should, obviously, delete this page when you submit your documents. Whilst your tutors will cover key information needed to complete each section. Please read the related Game Production Handbook readings as they will explain the charts and matrixes that appear in this document

\*\*\*Whilst you are completing this document you should take breaks to make iterations of your game/ make some sort of asset to remind yourself that this is something that is to be made not just written about...\*\*\*

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## 1.0 Overview

<One-line “X-statement”>

<Single paragraph overview describing the *player experience* offered by the game, the game world, the story, the player's character. Underscore the game's hook, reiterate the USPs and the high concept. Game name should appear in this statement.>

**Target audience:** <target audience>

**Genre:** <genre>

**Platform:** <platform>

## Unique Selling Points

<What are your game's USPs? Support with two sentences per area. Hint what does this game do that NO OTHER game does?>

<State how you will measure if you have realised your USP for each key area.>

<Guidance notes: Everything in your game should support your USPs and everything you introduce into your game should be relevant to the game's theme. If you are going to create *World of Goo*, everything in that world needs to relate to “goo”: the gameplay, the sounds, the story and characters, the art. In only two sentences per area, describe how each of the following key areas will be relevant to your USP: story, design, art, sound and technical. Be specific. Don't say, “I will have great sound that will relate to my USP. Say what sound and how EXACTLY. Why? The reasons are simple-- 1) We need to understand what you are thinking so we can give you feedback on it and 2) so you can be clear for your freelancers what you want>

## Game Specs

<At-a-glance info and stats about your game.>

Single / multiplayer:	
Game type:	<Race, stealth, survival...>
Gameplay time:	<How long should the average player take to finish the game on his/her first play through?>
Core gameplay mechanic(s):	
List of characters:	
List of NPCs:	
List of enemy types:	
Weapons/ special objects:	
List of pick-ups / power-ups:	
List of vehicles / other:	

List of puzzles:	
Number and timing of scripted events:	Eg. Ambush 1/3 of the way through the level Eg. Prison guard leaves guard post on a cycle every 30 seconds.
Number and timing of cutscenes:	Eg. Opening cutscene Eg. Establishing shot cutscene ½ way through the level when the player enters the first alien-breeding chamber.
Gold / money/ rewards in level:	<An example of a detail you might want to include, in a large game this could be useful information for balancing the whole game.>
Game / player progression details:	Eg. The Sniper enemy type is introduced. Eg. The U-Invent vending machine type is introduced.
Tutorial / hint scripts:	Eg. The player sees their first Little Sister here. When this happens, Atlas plays HINT_03_LS_01 on voiceover, informing the player they should harvest Adam from them.

## Game Features

<Provide here an overview sentence/ paragraph outlining the must-have features of your game. In the chart below include must-have, like-to-have and nice-to-have features. Note that you should change the features in this chart to what you have in the game.>

Category	Feature	Prod.	Art	Design	Eng.	QA	Average
Gameplay	dynamic missions objectives	3	3	3	3	3	3
Process	establish a system for circulating design documents and updates to documents to the team	3	3	3	3	3	3
Gameplay	easy to understand user-interface	3	3	3	3	3	3
Process	mission review process should also include multiplayer levels	3	3	3	2	3	2.8
Production	improve physics so explosions look more realistic	2	3	1	3	1	2
Gameplay	replayable missions	2	2	2	1	2	1.8
Gameplay	ability for player to customize character appearance	1	2	3	1	1	1.6
Production	support cut and past functionality in scripting tool	1	1	3	1	1	1.4

**3 = MUST HAVE**  
**2 = LIKE TO HAVE**  
**1 = NICE TO HAVE**

## **User Interface Diagrams**

<Drawings of your vision for the user interface for each of the core screens of your game (loading, menu, in-game, win/lost/repeat, credits) and showing health bars, score, etc. The UI should emphasise your USPs and adhere with the game's core visual aesthetics. From these diagrams we should get a good overall sense of what your game environment and visual aesthetics are. >

## **Control Scheme**

<Outline the control scheme for your game, including core accessibility options you are adhering to.>

## 2.0 Story Design Documentation

<Provide a one-paragraph synopsis of your game's story. This should tie in to/ be a refinement from a story angle of the overview paragraph you provided in page one. Again, it should be written so that it is clear how your story supports your core USPs.>

### Setting

<Describe the world the game is set in. >

### Characters

<Provide character descriptions and character backgrounds for the protagonist, antagonist, helper characters, and other relevant characters. Ideally these will be supported by sketches/ drawings which you will expand on in the art documentation. This information is core for planning out your modelling/ sprites and animations.

Protagonist

Physical description

Want/ Need:

- 1.What is the thing your character wants most in the world?
- 2.What is the worst that could happen to prevent your character from achieving that thing? (This should be a core element of gameplay)
- 3.Who or what is there to help your character?

Antagonist

Physical description

Want/ Need

Helper character(s)

Physical description

Want/ Need

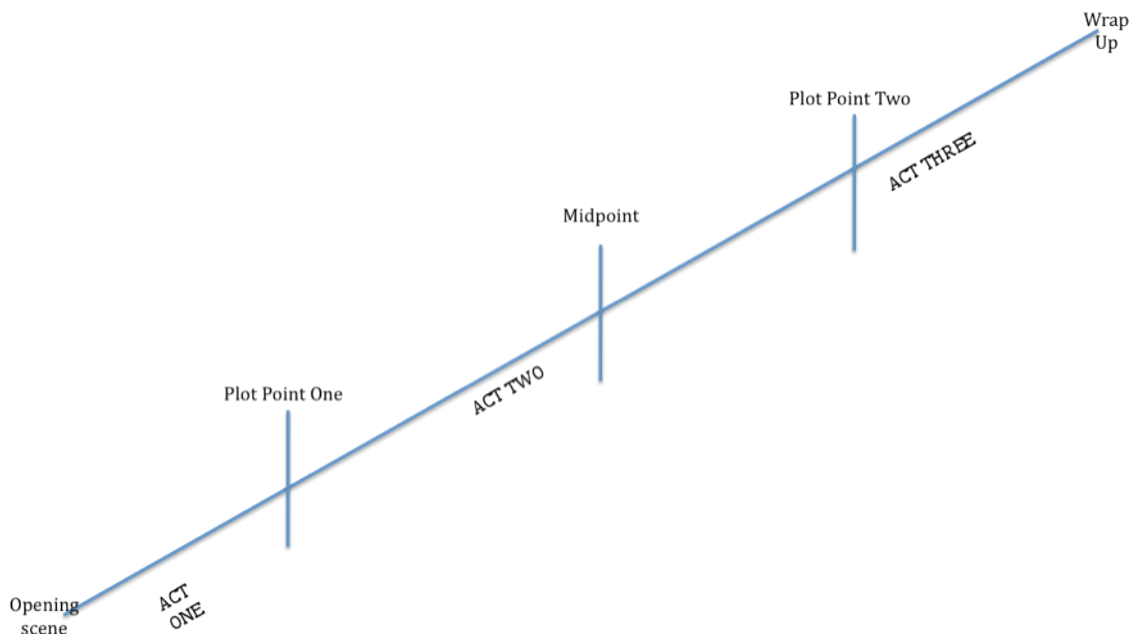
Other characters

Physical description

Want/ Need>

### Plot

<Outline the plot of your game, with a plot diagram that indicates the game mechanics that reveal each plot point. These plot points are your key scenes.



Opening scene:

Plot point one:

Midpoint:

Plot point two:

Wrap up:>

## Scenes

<For each of the key scenes you've placed on your plot diagram, identify:

Place:

Date/ day of week:

Time:

Temperature:

Season:

Lighting:

Sounds:

Smells:

Symbols/images:

Props:

Characters/relationships:

Dialogue

Subjects

Subtext

Action

Large

Small

Five senses:

Point of view:

Climax:

Exit line:>

## Techniques

<Highlight how each part of the story will be revealed/told to support the exposition revealed



through game mechanics/ gameplay. Methods could include:

- cutscenes
- scripted events
- interactive storytelling
- story branches
- environment features
- pick-ups
- audio voiceover>

## **Sample Dialogue**

<Provide sample dialogue, though for the AGP this will most likely be for background purposes.>

## Story and Gameplay Structure

Name: \_\_\_\_\_

Game Name: \_\_\_\_\_  
Characters: \_\_\_\_\_

Genre: \_\_\_\_\_  
Game World/Setting: \_\_\_\_\_

Est Time: 00:00 Amount of levels: 0 Number of cutscenes: 1	Est Time: ____:____ Amount of levels: ____ Number of cutscenes: ____	Time	Est Time: ____:____ Amount of levels: ____ Number of cutscenes: ____	Est Time: ____:____ Amount of levels: ____ Number of cutscenes: ____	Est Time: ____:____ Amount of levels: ____ Number of cutscenes: ____
--	--	------	--	--	--

Tension ↑ ↓	<b>Act 2.3</b> Describe the climax of the story? Description: _____ Gameplay: _____ Art: _____ Sound: _____ Assets: _____	<b>Act 2: Middle   Conflict</b>	<b>Act 3.1</b> How is the conflict resolved? Description: _____ Gameplay: _____ Art: _____ Sound: _____ Assets: _____
	<b>Act 2.2</b> How does the tension rise? Description: _____ Gameplay: _____ Art: _____ Sound: _____ Assets: _____		<b>Act 3.2</b> What happens to the characters? Description: _____ Gameplay: _____ Art: _____ Sound: _____ Assets: _____
	<b>Act 2.1</b> What is the conflict? Description: _____ Gameplay: _____ Art: _____ Sound: _____ Assets: _____		
	<b>Act 3: End   Resolution</b>		
<b>Act 1: Beginning   Exposition</b> Describe the story's setting: _____ How are the characters introduced? _____			What information does the audience need to know? _____ Extras: _____

## 3.0 Game Design Documentation

<Restate your game concept>

<In two sentences describe how your game design specifically supports your USP.>

<Please note that the game documentation section involves considerable diagrams.>

### World

<Describe the world your game is set in and describe the key areas of your world. Provide an annotated diagram to accompany your description. This is a locational description that supports the setting description in the story section.>

### Floorplans

<Provide diagrams/ annotated maps of ALL of your game levels/ scenes. Your floorplans should detail WHAT goes into the environment. They need to include how the player will move through the space, entry and exit points AND key environmental narrative cues (these should relate to USP)>

### Gameplay

<First provide a fictionalised account from the player's eyes of their journey through the game (whilst every playthrough won't be the same, in this account you are outlining how one playthrough might go. In this way, you can help the reader understand how the game will be played).>

<After you've situated the reader, describe your gameplay in detail using accompanying diagrams to support your explanation. Explain *why* and *how* the gameplay will affect the player. Each element of your gameplay should connect to/ help further your story and support your USPs >

<In your gameplay description you must cover off the following:.>

Win Condition(s) and smaller objectives, and how they are structured.

Puzzles, what are their mechanics, if used?

Player experience. Are you trying to evoke certain emotions in the player? What tension or release, challenge (when the gameplay is difficult) or sense of empowerment (when the gameplay is easy), should the player be feeling as they progress, and how is this achieved?

NPC interactions, if interesting design decisions are made here. Why did you choose the enemies and / or allies you placed in that aspect of the game? Is there more than one way of tackling them? Note that this will impact modelling and animation so it's worth having that in the back of your mind when you are planning out NPCs.

Detail key game progression points (this should match your game's story if you have a game with a character)

Detail how you will provide player help/ hints and support player's learning.

Anything else you want to add.

## 4.0 Art Documentation

<Restate your game concept. Yes, the exact same one you've written out a couple of times now.>

<In two sentences describe how your visuals specifically support your USPs>

<The sections below should be supported by images/ graphics>

### Overview of game's visual identity

<Provide a paragraph describing the visual look of your game (including colour palette, scale, dimension, mood). This paragraph will be core to communicating what you want the visual identity of your game to be and will become one of the key guidance statements for your game. You should support this paragraph with explanatory images.>

### Environment

<Describe the game's environment. Consider architecture, colour, lighting, mood, location, country, time of day, season, points of interest, weather, landscape, plants, skies, animals.>

Describe the visual identity of your game's key environment art assets and provide guidance/ guidelines (text and reference pictures) for each asset category>

Describe the asset pipeline for environment asset creation.>

### Characters

<Describe the visual identity of each of your key characters (antagonist, protagonist, helper character, other characters). Be sure to note accompanying props that will support visual characterisation. Each of character description should be accompanied by a model sheet—rough sketches that depict the character in a number of poses and from all angles: front, back, three-quarter and profile>

### Animation

<List the animations that are required for your game and how you will create them (e.g. what sprite package you will use, etc.) or where you will source them from. Again please provide drawings/ sprites to help us understand what animations:

Menu, loading, end state and credit screen animations

Character animation(s)

Object animation(s)

Environment animation(s)

Texture animation(s)

3rd Party/Motion capture animation(s) (if applicable)>

### User Interface

<Describe the intended art style of your UI and provide images to support your description. The diagrams can be cut and pasted from the first section of this document.>

# Asset List

<Provide an overview art asset list. Provide complete art asset list in the appendices>

## 5.0 Sound Documentation

### Game Description

<List a potted description of your games theme and genre – this can be pulled directly from your game design document.

*Example: “A platform title featuring a unique underwater gameplay mechanic making full use of the Wii and Xbox gesture based input devices as well as the standard controller”>*

### Storyline

<Give the sound design some life by giving details of the games storyline – this can be pulled directly from your game design documents.

*Example: “You are Joe, a tiny turtle who has to save the ocean from Maximilian an evil shark intent on taking over the world - in this action packed underwater platform game title. Play Joe as you swim and bounce from craggy outcrop to craggy outcrop and island to island saving all the starfish in the ocean before Max can get his Jaws over them”>*

### Target Platform

<When creating a document for sound design one of the first things one must tackle is the target platform, as this has a huge impact on

- a) how the sound will be implemented
- b) how the sound will be stored and in what format
- c) considerations around size and optimisation

A game title being produced for Nintendo DS for example has a very different set of benchmarks and limitations to a Sony PlayStation 3 title for example. In our case our example game is Flash; lets deal with that below:

*“The games target platform is Flash embedded for online play. The idea is the game will be deployable on social networking sites and allow users to interact with the game casually whilst still taking part in their social networking experience. Game data should be optimised for transmission on play; please make sure assets are of a reasonable size for streaming and pre-play download.”>*

### Concept Art

<It is **VERY** important to give an idea of what characters ‘look’ like when communicating sound ideas within a team – put in concept art of all of your games characters and environments.>



Joe the Turtle



Max the Shark

## Style Guide

<This is a very important and unique part of any sound design document – a very detailed description of the style of music and sound effects you expect to see from your sound designer/s. For example:

*Example: “In terms of style we see the game music having a Disney vibe but with a bit of a beat led-edge - think The Little Mermaid with a bit more of a modern feel, cute but not sickly. We want the music to be extremely cute and funky and the sound effects to reflect this.”*

NOTE: It is important to give examples of exactly what you want as well – inserting youtube links to music and sound design of a similar nature will really help your sound designer get to grips with what you need.>

## Asset Detail

<A detailed breakdown of what is needed in terms of sound for your game title, a full asset list should be supplied as a spreadsheet – for example:

<START ASSET LIST SNIPPET>



Asset No.	Asset Name	Asset Type	File Format	Asset Description	Asset Group	Asset Area	Beta?	Asset Complete?	Notes
1	turtle_swim	SFX	WAV	Joe swims along - must be cute!	INGAME	ALL_LEV	N	N	<i>Joe swims in a very cute fashion - try and communicate this thru the sound</i>
2	turtle_jump	SFX	WAV	Joe jumps - cute cartoon style	INGAME	ALL_LEV	N	N	<i>Joe jumps in an arc - we are thinking a classic jump twang like sound here - perhaps a jaws harp or similar...</i>
3	turtle_walk	SFX	WAV	Joe walks - think waddle - cartoon	INGAME	ALL_LEV	N	N	<i>Joe waddles rather than walks - he is a little cute turtle - bear this in mind when making this sound - let us know if u have thoughts on different alternate sounds to break up the movement sound a bit</i>
4	turtle_fall_water	SFX	WAV	Joe falls into water from a topside platform	INGAME	ALL_LEV	N	N	<i>Nice cartoony sploosh!</i>
5	shark_swim	SFX	WAV	Max swims	INGAME	ALL_LEV	N	N	<i>Max is a larger than life shark - remember this when designing the sounds - please don't make them too scary - keep it cartoon</i>
6	shark_jump	SFX	WAV	Max jumps - must sound cartoon like but also communicate the danger of max approaching!	INGAME	ALL_LEV	N	N	<i>Max should definitely make quite a large sound when he jumps :)</i>
7	crab_shuffle	SFX	WAV	Crab enemy shuffle	INGAME	LEVEL1	N	N	<i>The shuffle is very important as it alerts the player to upcoming attack!</i>
8	level_1_music	MUSIC	MP3	Cute upbeat disney like track - with a bit of a beaty edge	INGAME	LEVEL2	N	N	<i>Please let us know your thoughts / feedback on this...</i>

</END SNIPPET>

A good asset list will not just contain a list of sounds – it will also contain reference graphic material and details on naming conventions of files and references to the Style guide

**Note:** An example asset list has been created for you in excel for a Zombie action game containing filters which allow you to easily check what has been implemented in terms of audio for your title on a rolling basis – you can also easily add a priority column to the spreadsheet to each asset you add. It also contains descriptions on the various fields – hints and tips on filling out data and on entering information on Style and Game Description; do study these.>

## Risk / Planning & Prioritising

## ***Risk***

It's important to list and plan for risk during any project and sound is no exception; firstly you should list any obstacles you might foresee completing the sound for your project and solutions to combat said issues, here are a few starting points:

- Sourcing your Freelancer
- Recording any voiceovers
- Outsourcer reliability
- Cost Implications – i.e. if an outsourcer fails to deliver how much would it cost to buy in alternative music for instance

## ***Planning & Prioritisation***

Good planning is the key to a healthy project – setting up a set of prioritised deadlines or milestones when it comes to delivering audio content will keep the project running smoothly and without too many bumps along the way – for example;

- Week 01: Construct all asset deliverables
- Week 02: Create Style Guide
- Week 03: Complete remainder of sound documentation
- Week 04: Source some holding sound effects so the game is not silent whilst in development
- Week 05: Refresh asset list
- Week 06: Refresh Style guide
- Week 12: Begin planning to contact outsourcer
- Week 14: Contact outsourcer/s
- Week 15: Liaise with outsourcer/s on asset list and style guide – amend with changes if necessary
- Week 16: Prioritise all sound material – music + sound effects
- Week 18: First Audio Milestone - priority 1 sound effects due
- Week 19: ...
- Week 20: ... etc

## ***Prioritisation***

Prioritising your sound assets is ESSENTIAL for your project to move forward smoothly – you need to very early on in development make decisions on which sounds and music you feel are important to your game above others. For example – if you were demoing your game to potential investors; what is the minimum you think would be required to show progress and an outline of the games audio style... Using our example game as a basis, we'd probably be looking at an ingame tune and sound effects for the main character (Joe) and main enemy (Max).

## 6.0 Technical Documentation

### Introduction

#### ***Document description***

<Summarise the content and purpose of this document here. The purpose of this document is to:

- list the target platforms
- identify any technical constraints, and
- plan the construction of the game

The information in this document is subject to change.>

#### ***Game description***

<Insert a quick summary of the game idea here. For a separate technical design document you can copy the summary of the game from the game design document. If you combine this document with a game design document, this section can be omitted.>

### Methodology

<Describe your intended methods for project planning, construction techniques, and development practices, eg. Scrum, evolutionary prototyping, milestones, pair programming. Explain your teams' experience with these methods. Justify your choices.>

### Programming

<List the programming languages, libraries, or game engines you will be using and describe which parts of the game will be constructed in each. Describe your teams' experience with these languages, libraries, and engines. Justify your choices.>

### Version Control

<Describe your chosen version control system(s), how it is hosted, backed-up. Will you be subjected to bandwidth or size limitations? Describe your teams' experience with this system. Justify your choices.>

### Build Tools

<List the tools you intend to use in constructing your game, eg. Visual Studio, Unity, GNU Make. Include specific tools and any dependent programs or operating systems required. Describe your teams' experience with these tools. Justify your choices.>

### Testing

<Describe the tools and processes you will use in testing your game internally, externally, and at each stage of development. Describe your teams' previous experience. Justify your choices.>

### Technical challenges

<If your game requires the development of previously untried game mechanics, describe them here. Detail your approach to development if this differs from your general methodology describe above. Justify your inclusion of these elements in your game's design.>

## Hardware limitations

<Describe here how you intend to fit your game within the limitations of your chosen hardware. This is one of the hardest parts of your technical documentation to write upfront and without previous experience. It is acceptable to make guesses in the first revisions and update as your game develops. However, beware that changes here can have far reaching consequences for other parts of your game's development; in particular on your asset creation. For this reason you should prototype your game with place-holder assets as early in your development process as you can.>

## Controllers

<List the controllers you intend to support. Describe how you intend to test the game with each of the controllers you intend to support.>

## Memory

<What are the runtime memory constraints of your chosen platforms. Provide a memory map showing how much of the available memory you intend to allow for each part of your game, eg. program code, textures, 3D models, scripts, level data, save data, etc.>

## Processing

<List the available processing resources of your chosen platforms. Provide a processing time budget for the components of your game. If you intend to run your game at 60 frames per second, you will need to fit all of your per frame processing, including rendering, into 1/60<sup>th</sup> of a second or 16 milliseconds. If you intend to run slower processing asynchronously you should still budget how much time to give each slice. Don't forget to include any operating system overheads.>

## Footprint

<Describe the space limitations for your target platforms, eg. web, CD, DVD, digital download. Provide a memory map showing how you intend to fit your game code and assets within the space you have available. Depending on your game's design, you may not need this section.>

## Other resources

Any other hardware constraints that you need to work within go here.

## File formats

List all of the file types you intend to use in the construction of your game. Include the file extension, approximate file size, internal format if important, if this file under source control, is it source / intermediate/ final asset, etc. Include a description of how the final asset files are built from the source files and intermediate files; a diagram is useful here.

## Naming conventions

Detail the rules you intend to apply to the naming of files, folders, objects, and variables within your game. Tips: abbreviate to keep file names short but include enough prefixes or extensions to allow you to easily identify each file within your project. Try to avoid spaces, symbols, or inconsistent use of upper / lower case within your naming conventions.

## Glossary

List any game specific or platform specific jargon used within this document.

# 7.0 Production

## SWOT Analysis

< Provide a paragraph outlining the strengths and weaknesses of your game's concept, market opportunities, and any threats that might impact the game's success.>

Table 1. SWOT Analysis

SWOT ANALYSIS			
The primary competition for Justice Unit is PostMortal, a first-person shooter set in a superhero universe.			
INTERNAL FACTORS		EXTERNAL FACTORS	
Our Strengths	How to Exploit	Our Opportunities	How to Exploit
Compared against rival PostMortal, Justice Unit features a strong multiplayer experience, including a customizable multiplayer avatar, dozens of gameplay types, and several maps.	Emphasize these features in the marketing plan.	Justice Unit will launch at the same time as the movie sequel, which will garner additional attention for the game.	Cross-promote game and movie - create a separate story for the game that intersects with some plot points in the movie.
Our Weaknesses	How to Neutralize	Our Threats	How to Neutralize
Justice Unit features a free-roaming, nonlinear single-player experience, which will not deliver the same thrills as the linear, heavily scripted PostMortal.	Downplay this feature in the marketing plan and focus on the multiplayer features.	PostMortal is scheduled to release 2 months before Justice Unit and this may have a negative impact on sales - people may buy the PostMortal superhero game instead of Justice Unit.	Build early buzz about the player's ability to play as their favorite character from the Justice Unit. Sponsor a create an enemy contest, where the winner gets to meet the cast of the movie and get an advance copy of the game.

## Competitive Analysis

< In addition to a SWOT analysis, you will also want to conduct a full competitive analysis of all current and future competition. Note you should identify as many competitors as possible, whether direct competitors or not.>

**Table 2. Competitive Analysis**

Game	Developer	Publisher	Platforms	Est. Release Date	Game Summary	Features	Avg. Review	Sales Figure
PostMortal	Funtime Studios	A-1 Publishing	Xbox360, PS3	Oct-09	PostMortal is a new IP about superheroes. It is a third-person action-adventure game and the player assumes the role of Avenger Boy. Other superheroes will be in the game, but the player only controls a single hero throughout the game. The game features features traditional costumed superheroes in a 1950's world setting. Avenger Boy will band together with the other heroes to battle Dr. No Good.	*Avenger Boy is main player character. *New IP that has no cross-over appeal *Limited multiplayer modes, although it will have a small online co-op campaign. *Traditional third-person action-adventure, uniqueness is based on settings and characters *Each character has one unique superpower they can use against the enemy. They will help in the game if their assistance is requested by the player.	n/a	n/a

## ***Risk analysis***

<Here you should write down what you consider to be risks in the development process. Stuff that might go wrong. Any innovations posing risks if they don't work out as hoped?>

Eg. Learning tools concurrently with development, unsure what can be achieved in the timeframe.

Eg. Lack of proper version control, so need to carefully save and organise own work.

<insert risk analysis classification grid diagram>

Table 3. Risk analysis

Risk	Probability of Occurring	Impact on Project	Risk Classification	Mitigation Strategies
Licensor who own <i>Justice Unit</i> IP may not deliver feedback and approvals in a timely fashion. If they don't approve content of gold master, console submission process will be delayed, which may impact the ship date.	HIGH	HIGH	1	<ul style="list-style-type: none"><li>*Schedule kick-off meeting with licensor early in pre-production to review the project goals and schedule constraints.</li><li>*Work out defined approval process that both parties agree to.</li><li>*Deliver game assets on a regular basis in pre-production to get feedback and approval before production begins.</li><li>*Once playable builds are available, deliver builds on a regular basis for licensor to review.</li><li>*If possible, include caveat in contract that if they don't respond with written feedback in 10 days, the item will be considered approved.</li><li>*Establish good working relationship with licensor contact and try to include them in the development process whenever possible - make them feel like they are part of the team and have ownership in the game.</li></ul>



Design might be able to create a workable gameplay system where the superhero powers are balanced equally against each other.	LOW	HIGH	2	<ul style="list-style-type: none"> <li>*Focus on prototyping the core superhero powers for each character to limit the number of variables that must be balanced.</li> <li>*Work with engineering to get a digital prototype up and running as quickly as possible.</li> <li>*Create a system that allows variables to be easily changed and tested in gameplay.</li> <li>*Continue brainstorming ideas for superpowers until the core features are prototyped and approved.</li> </ul>
During the 2 year development cycle some employees may leave the company.	HIGH	LOW	3	<ul style="list-style-type: none"> <li>*Train at least 2 people to handle specific tasks on the project.</li> <li>*Schedule time for hiring and training new people mid-project.</li> <li>*Focus on creating a positive working environment to increase employee retention.</li> <li>*Be aware of any sudden changes in employee's work habits so you can identify at risk people and improve their job satisfaction before they start looking elsewhere.</li> <li>*Require everyone to document the work they are doing and to check all assets into source control system at the end of each day.</li> </ul>
Initial game concept art may not accurately depict what the <i>Justice Unit</i> characters will look like in the game.	LOW	LOW	4	<ul style="list-style-type: none"> <li>*Concept art will be based on character design bible provided by the licensor</li> <li>*Feedback from licensor can be quickly implemented until they are satisfied with the concept drawings.</li> <li>*Make sure the artists get all available character concept art from the movie.</li> </ul>

## Limitations

<Show awareness of the boundaries of what is possible. Early on during planning, if limitations will prevent achieving your goals, then MUST adjust goals! Keep this list short – just the limitations that you have to bear in mind.>

Eg. No streaming technology, therefore level size is restricted to what can be loaded into memory

Eg. Maximum number of enemies spawned at any one time is 5

Eg. Don't have access to testers in the target audience

Eg. No artist time available to create new assets

## Milestones and Deliverables

<Short introductory paragraph outlining overview production schedule and milestones. Include in appendix complete list of deliverables. The table below is an example only and should be revised to match milestones and delivery dates listed in the module guide. >

Table 4. Milestone and Deliverables

	First Playable	Alpha	Code Freeze	Beta	Code Release
Time Frame	12 - 18 months before code release	8 - 10 months before code release	3 - 4 months before code release	2 - 3 months before code release	First code release candidate available to QA 3 weeks before final code release deadline.
Engineering	Basic functionality for a few key features is in to demonstrate very basic game play.	Key game play functionality is in for all game features. Features work as designed, but may be adjusted and changed based on feedback. Game runs on target hardware platform.	Code complete for all features. Only bug-fixing from this point forward. No new features are added, unless approved by senior management.	Code complete, only bug fixing from this point forward.	Full code freeze. During this phase only crash bugs can be fixed. Critical bugs can be fixed with approval.
Art	Two to three key art assets are created and viewable in the build. The assets demonstrate the look and feel of the final version of the game.	Assets are 40 - 50% final, with placeholder assets for the rest of the game.	Assets are 80 - 90% final, with placeholder assets for the rest of the game.	All art assets are final and working in game. Only major bug fixes from this point forward.	Full art freeze. No art fixes, unless it is to fix a crash bug.



Production	Basic game requirements and game plan are completed.	Full production has begun. The game requirements and game plan are fully completed and approved. If working with licenses, all licenses are secured and an approval process is in place.	Localizations have started. Manual is in process of being written. Marketing assets are being generated.	Localizations are complete, only bug fixes from this point forward. Manual is complete. External vendors are finished with work. All approvals for licenses are secured. Development team can start rolling off project.	All production tasks are completed. If submitting game to console manufacturer, the submission forms are filled in and ready to go.
	Can test game against the first playable milestone deliverables defined in the game requirements phase.	Game is now playable as a full game, although there are some rough edges and holes in some of the functionality. Playtesting can begin. Can test against the alpha deliverables expected for this milestone.	Test plan is 100% complete. Full game functionality can be tested and bugged. Play testing continues. Can test against the code freeze milestone deliverable list.	All aspects of game can be fully tested and bugged. Some playtesting continues in order to for design to put the final polish on the game.	Test code release candidates for any crash bugs that will prevent the game from shipping.
QA					

## Work Breakdown Structure

Table 6. Work breakdown Structure

<The WBS below is just a sample. You need to modify it to include your game tasks (note, for instance, there is no animation listed and your game will most likely need either 2d or 3d animation.)

<b>Art Tasks (Villain's Lair)</b>	<b>Duration</b>
Create prototype	5 days
Implement prototype feedback	1 day
Create level geometry	20 days
Add placeholder textures	3 days
Fix first round of bugs	3 days
Create destructible objects	2 days
Add final textures	10 days
Create player reference map	.5 days
Create special effects	2 day
Optimize level for budget constraints	5 days
Polish map	5 days
Fix final round of bugs	3 days
<b>Design Tasks (Villain's Lair)</b>	<b>Duration</b>
Design initial level layout	2 days
Design initial mission scripting	2 days
Script prototype	.5 days
Playtest prototype scripting	.5 days
Implement prototype feedback	1 day
Script first pass of mission scripting	5 days
Script first pass of multiplayer scripting	2 days
Review scripting	1 days
Script second pass	5 days
Verify all supporting files are tagged correctly	1 day
Create localization tags for in-game dialog	1 day
Polish scripting	3 days
Fix final round of bugs	2 days
<b>Sound Tasks (Villain's Lair)</b>	<b>Duration</b>
Create sound design	3 days
Implement sound design prototype	2 days
Implement prototype feedback	2 days
Complete first pass of sound implementation	3 days
Polish sound	2 days
Fix final round of bugs	1 day
<b>QA Tasks (Villain's Lair)</b>	<b>Duration</b>
Playtest prototype	1 day
Test geometry and terrain navigation	7 days
Check textures	2 days
Test initial scripting	1 day
Test second pass scripting	1 day
Final test all level geometry and textures	5 days
Final test for mission scripting	1 day
<b>Approvals (Villain's Lair)</b>	<b>Duration</b>
Approve initial layout	1 day
Approve initial art prototype	1 day
Approve initial design prototype	1 day
Approve sound design	1 day
Approve final level, scripting, and sound	1 day

## ***Production Schedule***

<Provide a production schedule with milestones and deliverables. These should match the dates in the module guide>

## ***Promotion Strategy***

<Detail how you intend to promote your game and what external platform (e.g. Kongregate, Facebook) you will upload your final build to. This should be a fairly detailed section. Use project descriptions on kickstarter and vimeo for inspiration .>

# Appendices

Art asset list

Sound asset list

Please credit the creators of any assets used from other sources and where they came from.

Optional supporting materials - eg. video walkthrough of blocked environment, photos of lego model, storyboards, concept art, "mood board" (collage of reference pictures), "sizzle video" (video stream of inspiring clips), music, flow charts, your choice here!

Focus group testing report

Signed freelance contracts (see Paul's template). The contract must be accompanied by a list deliverables outlined in WBS and dates you want items delivered by.