1. **Geeks VS Bugs**
   1. **Introduction**
   2. **System Design Specification**
      1. **Methodology**
         1. **Game Development Lifecycle (GDLC)**

Game Development Lifecycle is a methodology that was derived from SDLC or Software Development Lifecycle. It was constructed specifically for the needs of video game development. Unlike the SDLC with 5 phases, GDLC is composed with 7 succeeding stages.

* + - * 1. **Initiation**

Initiation is the initial development phase for GDLC. This phase consists of the planning and concept development of the game. Decisions such as game mechanics, storyline, characters, dimensions, potential players and etc. are being brainstormed. It is considered as the planning stage of SDLC.

* + - * 1. **Team building**

Second phase for GDLC is the staffing or team building. This is the phase when developers are being hired for specific tasks. In this phase, assignments must also be distributed properly depending on individual strength and skills. Clarifications about individual goals must also be discussed within this stage

* + - * 1. **Pre-production**

One of the most important things before jumping directly to coding the game is pre-production. It’s the same as planning and designing the game itself. In this phase, details are broken-down and concepts are developed into mock-ups. Gameplay, art styles, game engine and platform must also be defined here.

* + - * 1. **Production**

Fourth phase is the most exhausting and time consuming part of development for most cases. Most coding is done in this stage. Assets such as graphics and sounds are developed in this part.

* + - * 1. **Alpha version**

Alpha version is the phase where the game itself is playable, but incomplete. For example, if the game has some playable level, it has already reach alpha version. Most of the core gameplay must be already included in the alpha version game. Testing by fellow developers within the team and bug fixing mostly contain this phase.

* + - * 1. **Beta version**

Beta version is the phase where all the game is all set. It means, beta version game is already a full game. This also the time when third party testers will get hold of the developed game. Though the game could be played as a whole, it is still subjected to major changes depending on the results of beta testing. Feedback from testers must also be collected in this phase. This is also used to expose glitches, bugs and exploits.

* + - * 1. **Release version**

This is the phase where the game is launched or shipped. It could be uploaded in Internet or any storage device for distribution. This phase also handles the patching and maintenance. Though the game was already considered as fully developed, updates must also be done from time-to-time.

* + 1. **Software Design Specification**
    2. **Hardware Specification**
  1. **Summary**