The first section of the book are game design basics and the first chapter is the role of the game designer. A game designer’s role in the creation of a game is fairly complex. The designer is a combination of Director (controlling the overall direction of the game design), Manager (keeping the various members of the design and production team on schedule), Critic (evaluating what is being produced), Technician (ensuring the game mechanics and game systems work and are balanced), Author (creating and ensuring the game narrative works), and Architect (creating game worlds and levels). Given the wide variety of tasks, the game designer must become involved with all aspects of the game design and game production. However, one of the primary tasks of the game designer is to be an advocate for the player.

Being an advocate for the player means taking the players role in the design and production process. This would include both major things (is the game fun to play) and minor things (are the game menus easy to use). A good game designer needs to understand what players want and how to implement these things in the game. There are two ways to be a good player advocate; learn to analyze games to understand what makes good and popular games, and learn to use playtesting to evaluate elements of the game under production.

Analyzing games is a necessary skill for a game designer. This involves playing games with an “analysis mindset” and being able to identify game mechanics and game systems. This is a skill developed by:

- Playing many different kinds of games.
- Playing games in a slow and systematic fashion
- Looking for game mechanics and game systems during game play.

These skills are necessary for game designers because analyzing games is an important step, along with playtesting, to becoming a player advocate.

Game Designers should understand and play a wide variety of games. Good and effective game mechanics and game systems can be found in many different kinds of games. Even if your personal preference is to only play First Person Shooter games, you should make it a point to play many other kinds of games. Learning the game systems and game mechanics behind Role Playing Games, Strategy Games, and (for example) Hidden Object Games will provide examples of game systems that could be imported into other games. The bottom line is that game designers must play (and analyze) a wide variety of games.

Playing a game and analyzing a game are much different tasks. When playing a game the player should be (in good games) caught up in the game flow. The experience should be immersive, challenging, and fun. The player should (if the game is designed well) lose themselves in the game. Analyzing a game requires a much different playstyle. The analyst must understand the underlying game systems and game mechanics as the play the game. This often involves choosing multiple options when playing a level or quest and understanding what happens as a result of each choice. Often, playing a game for analysis requires the player to backtrack, replay sections of the game, and deliberately fail and succeed. This style of gameplay is often much more slow than regular gameplay. The method for playing a game in order to understand the underlying game mechanics and game systems should be practiced.

The final skill that a game designer needs to develop when playing games for analysis is recognizing game mechanics and game systems. A game mechanic is a set of rules or conditions that serve to change how the player plays the game. For example, a game mechanic might be how melee combat is done with a sword. The player can use different kinds of sword strikes to fight an enemy and each kind of strike would do different amounts of damage. The important thing is to understand how such game mechanics tie into the other elements of the game such as level design, non-player character behavior, and game narrative. Games typically include hundreds of game mechanics.

Game systems are sets of player behaviors that are done over and over in the game and that are used to progress the game during gameplay. Game systems could include different kinds of game mechanics arranged in a repetitive pattern. For example, the game could be designed so that the main game character must break into an outpost, kill all the bandits, and collect resources to upgrade their weapons and abilities (Range 2). This game system is repeated.
throughout the game and serves as a way for the player to progress through the game by completing quests and getting resources to upgrade their abilities and weapons. In order to recognize game mechanics and game systems you will have to learn by viewing some example analysis of current games.

Before viewing some examples of game analysis, you should understand in more detail the concepts of game mechanics and game systems.

Game Mechanics is a very general term and can refer to a number of different elements in a game. These elements define the gameplay (how the player interacts with the game). Some of these elements include:

General Game Rules: This would define a success or fail condition for the player. Examples of rules in games would be the checkmate rule in chess or the rule that says a player’s army must capture a flag in order to win. Rules would also define how the player makes moves in a turn-based game, how far ranged weapons can shoot, or how much damage a sword will do when hitting the enemy. Many games have a large set of rules that the player must learn in order to play the game.

Game Environmental Rules: These define the limitations that the player must consider when playing the game. These might include how far the player can jump, how many items they can carry, how much health or stamina they have, etc. These rules serve to limit the player in the game environment and, like general game rules, serve to define the gameplay.

Game Structural Mechanics: These define the structure of the game which could include how the player progresses through the game by, for example, completing quests, getting jobs, following a narrative, etc. These could also define how the player interacts with Non Player Characters.

While Game Mechanics define the rules and parameters of a game, Game Systems define and control the behavior of the player. A Game System would consist of a series of actions by the player designed to progress the player through the game, engage the player with the game, or entice the player to continue playing. For example, an Adventure game might include the game system of exploring a tomb, solving puzzles, and getting a reward that helps the player explore more complicated tombs. This game system consists of a repeating series of steps the game uses to engage the player.

Both Game Mechanics and Game Systems are critical to making a game fun for the player. The Game Designer must be able to identify and understand what such mechanics and systems are, understand how to implement them in the game, and be able to evaluate how effective they are for the player.

As an example, download the file envirobear2000.zip (posted on the web site http://staffwww.fullcoll.edu/dcraig). Open this file and run the program (this program only works on PCs). Use the following steps when playing this game.

1. Play through the game up to the point you understand how to play and have played a bit of the game.

2. Identify the goal of the game for the player. How will the player reach the goal (or goals)?

3. Explain how the game teaches the player to play the game.

4. Explain the game Narrative or story behind the game.

5. List the game rules and the game conditions the player must follow in order to play the game.

6. Identify sets of repetitive actions that the player will do that are necessary for the player to progress in the game.

Looking at EnviroBear2000 we can identify some of the game mechanics and systems.

Game Purpose
The player takes on the role of a bear driving a car. The goal of the game is for the bear to get enough food before winter (which is measured by a running timer). If the timer runs out before you have eaten enough food and driven into a cave you will lose.

Game Tutorial

- This game does not include any kind of tutorial but does have an opening screen telling the player what to do.

Game Narrative

- The only narrative in this game is presented in the opening screen and explains that your character is a bear that must get enough food to survive winter.

Game Mechanics

- Your character must drive a car in order to collect food.
- In order to drive the car your character must shift gears to either drive (forward) or reverse, release the break, and press the accelerator. You must also steer the car with the steering wheel.
- Your game character can only use one paw to control the car.
- In order to drive the gearshift must be in the D position and in order to go in reverse the gearshift must be in the R position.
- In order to go forward or reverse you must press the accelerator pedal. In order to stop you must press the brake pedal.
- You can only change from D to R when the car is at a stop.
- Food will fall into the car from the sunroof
- In order to cause food to fall into the car you must run into the lake to get fish, run into a tree to get acorns, and run into a bush to get berries.
- You must grab food items and eat these items. The car fuel gage records how much food you have consumed.
- Other non-food items can fall into the car. These include leaves, rocks, bees, and a wolverine. These items will clutter up the insides of the car.
- Any item that falls into the car can block the operation of the pedals and the gearshift.
- The game character can grab items in the car and throw these items out the window.
- When your character has eaten enough food you must drive the car into a cave.

Game Systems

- Getting Food System
  - Steer car into food sources
  - Collect food and eat food
- Manage resources
  - Grab non-food items
  - Throw items out of car