Artificial Intelligence
If the Game Mechanics section describes how the player can interact with the game-world, then the Artificial Intelligence section documents how the world will react to the player’s actions. How will the opponents the player faces in the game-world behave? What will they do in which situations? This section may also describe how the game-world behaves when the player is not doing anything. For instance, it could discuss ambient behaviors such as how townspeople go about their daily business.

Some design document authors may prefer to include the Artificial Intelligence section in the Game Mechanics section, but I prefer to keep them separate if possible. Whether to include the Artificial Intelligence section within the Game Mechanics section depends on the nature of your game. For a game such as Lemmings, where the player controls and the AI are tightly interwined, it makes perfect sense for the author of the design document to discuss them in the same section.

In games such as Doom II, the player mechanics and the behavior of the AI agents are discrete enough to be described in separate sections of the design document. This makes the programmer’s navigation of the document easier, since the processes of working on the player’s movement and the creatures he will battle are customarily separate coding tasks.

In the AI section you will want to do your best to fully describe how you expect the game to behave for the player. If you are working on a game where the player moves her character around in a game-world where she encounters other characters, you will want to describe how those characters react. Do they ignore the player until she initiates a conversation? Or are they attracted to the player? Can they pathfind around the area in an apparently intelligent manner, or are they walking on predefined paths? Some NPCs may initiate combat with the player; when and why do they decide to do this? Is it based on seeing the character? Hearing her? Or are they activated by level-designer specified triggers? Or all three, in different...
ent situations?
How smart are the characters? Are they able to hide around corners, sniping at the player from a safe location? Do they flee when wounded? There are a number of questions you should answer in the AI section, enough to give the AI programmer an idea of what he needs to implement. The more questions you answer, the more likely the programmers will create behaviors in the game that match your expectations and vision.