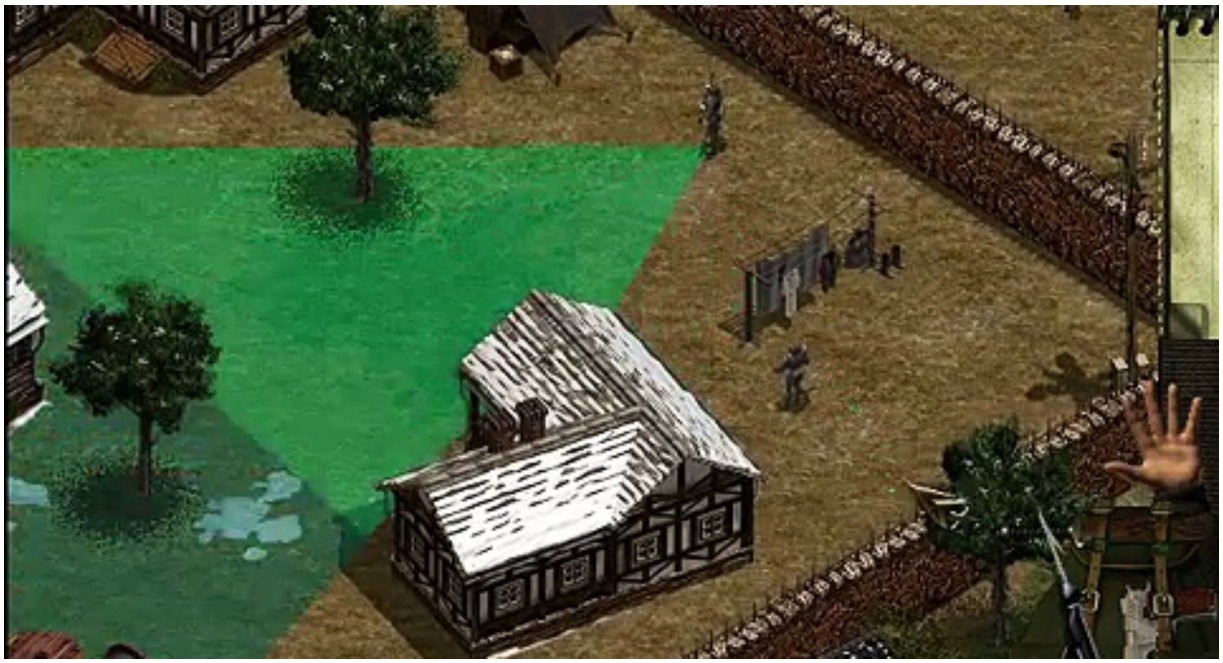
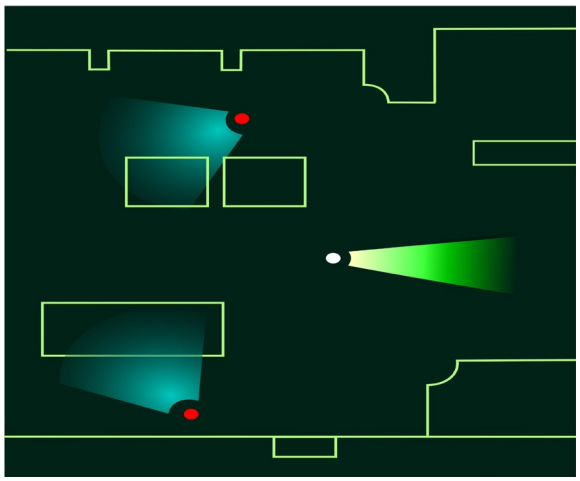
Individual Assignment II:
HTML5 Canvas Game

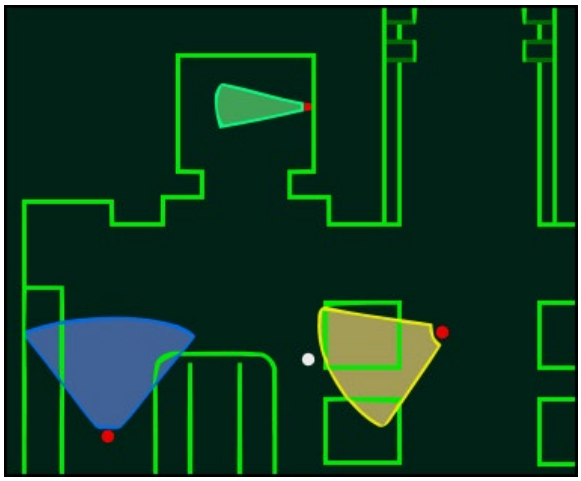
Stealth:

There is a genre of games where your objective is to infiltrate in an enemy area without being caught. This genre is usually referred as stealth or espionage games. Usually we find this type of game merged with other genres like combat or platform. In this practice you will need to create some of the mechanics of a stealth game.

Some examples of the games featuring stealth are Comandos or Metal Gear Solid (or https://www.youtube.com/watch?v=Rqp1z-hkVgo). In these games, the area of detection of enemies is sometimes depicted as triangular areas or portions of a circle:







What to do:

- **Player**:
  - Movement: with keys or with mouse (**1 point**)
  - Hide/dig: the player is able to hide (digging a hole), so it is not detected even if the detection area is over him (**1 point**)
  - Hack/kill: the player can "deactivate" enemies or enemy cameras approaching to them by the back and using the key/mouse (**1 point**)
  - Build "box": the player can build up to three boxes similar the ones used to build the level (**1 point**)
  - Stealth bar: will be reduced while you are inside a detection area (**1 point**)
- **Enemies**: if the player is detected he loses and the game restarts.
  - Fixed enemy/camera: the detection area is fixed and does not change (**1 point**)
  - Rotating enemy/camera: the detection area is rotated following some pattern, like the head moving right and then left (**1 point**)
  - Moving enemy: the enemy moves following some pattern (and the detection are also moves along with him). This can be combined with previous type of enemy (**1 point**)
  - Guided missile turret: A turret that launches missiles that will follow the player for some seconds and then explode (**1 point**)
- **Level**:
  - Box: cannot be trespassed by the player or the enemies. Can be trespassed by the detection area. Should be used to build your level (**1 point**)
  - Design: design of a nice level featuring examples of all the previous game elements (**1 point**)
- **Presentation**: This time you will have to present the game only to me, having 10 minutes for showing the game, and explaining the technical aspects of the development.

Delivery:

- **Format:** A compressed folder including the game and the presentation. You can include an extra document explaining anything you wish but is not mandatory (the presentation is enough)
- **Deadline:** 8th of January. (you need to ask me for a date/time).
- **Estimated effort:** 15-20 hours (some in class)

Assessment Criteria:

- **No extra marks will be given for things not requested (nice graphics, lives, bullets, extra levels…) If not approved beforehand by the teacher. If you have proposals tell me so.**
- Degree of fulfilment of the requirements. The requirements are open, so we will discuss more about them in class.
- Proper documentation and structure of the code (comments, naming of functions and variables, clarity of the code, proper structures…).
- Presentation of the work done.