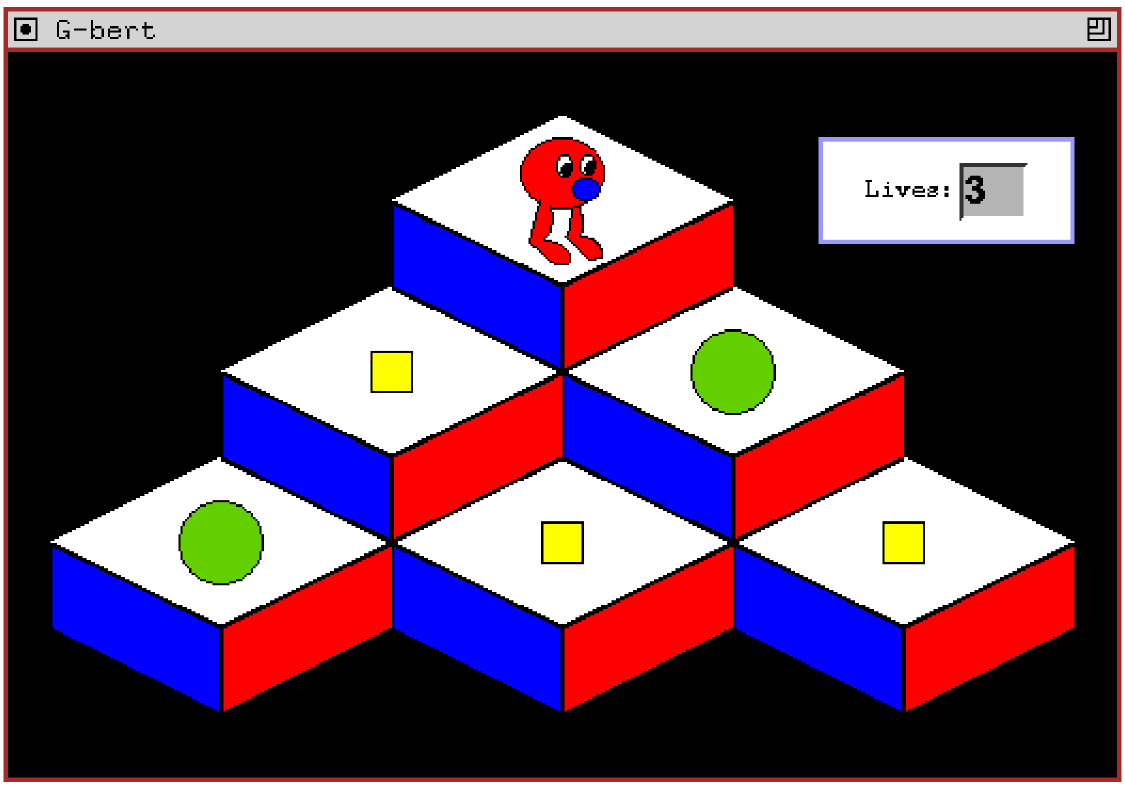
G-bert

In this task, you will make a simplified game similar in some ways to the game “Q-bert.” The background consists of a pyramid of blocks. On top of each block is a marker. The player moves G-bert to each cube and collects the markers. Balls drop down from the top of the pyramid and randomly fall down the blocks. If a ball touches G-bert, the character begins again at the top block and loses a life. The player moves by clicking on the top of the block where G-bert should move. G-bert only moves to a block if it begins on an adjacent cube and can move both upward and down. The player wins when all of the markers are collected.



We provide the background and a bitmap image for G-bert. You will be demonstrating G-bert’s behavior as well as the behavior of the bouncing balls. When you demonstrate objects that move, remember that it’s okay if the movement is jumpy. Gamut isn’t set up to let you demonstrate smooth motion. The characters will just jump from one point to the next. Also, the background we provide for you is not complete. You will have to augment it so that Gamut will know where the player is allowed to click the mouse as well as how G-bert and the balls move.

The player is supposed to click on the top of a cube to show where G-bert moves. Since Gamut doesn't support a polygon object, you can't draw a guide object that exactly fits the top of the cube. It is okay to use rectangles, instead.

- **Open the file "gbert.gam". This file includes all the needed starting components. This is a longer task so make sure you save your work in phases. If you want to save multiple files, just make sure they all begin with the word "gbert" (gbert1.gam, gbert2.gam, etc).**
- **Demonstrate how G-bert moves. Use the click icon to show how the player clicks on the top of a cube. You will need to draw something to show where the cubes are located and how the board is connected.**
- **Create yellow rectangles to serve as markers as put them on the board.**
- **Demonstrate how the markers are collected when G-bert lands on them.**
- **Create a green circle to be the bouncing ball.**
- **Demonstrate how the ball travels randomly down the pyramid. You will need to use several widgets and draw guides on the board to support this. To make sure that the ball keeps coming down from the top make the ball's path loop around to the top.**
- **Demonstrate that when the ball hits G-bert, G-bert loses a life and goes back to the top of the pyramid.**
- **Demonstrate that the game is won when G-bert collects all the markers. A big sign saying "You Win!" would be fine.**
- **Demonstrate the losing condition when G-bert runs out of lives. A sign saying "You Lose..." would work.**
- **Save your game in the "gbert.gam" file.**