

1. Program Description :-

This program is a clone of star-wars robot which can walk and fly. If the robot is on the ground then it will walk but if it is in the sky then it will leap. The robot can also jump and when it comes in air a sword automatically comes in his hand. While he skims in the air, jet bubbles also come out of his legs. The components of humanoid include :-

- Head
- Eyes
- Legs
- Arms
- Sword
- Flying Bubbles

2. Module Description :-

This part of the documentation includes short description of all the modules in the code.

Module Name	Parameters	Description
InitGL	Width, Height	This is the first method called after instantiating the glutInit Frame. Here, we need to load smooth textures for quadratics object and set perspective, clear color and lights.
CreateTexture	Imagename, Number	This method opens image, transfer image to string buffer, bind it with an ID and set the texture using glTexImage2D.
CreateLinearFilteredTexture	Imagename, Number	Same as above. Only difference is the method sets texture parameter to GL_LINEAR.
LoadTextures	Number	Here we generate texture ID's and associate texture ID with image.
Display	-	This is the main display method where humanoid is drawn.
DrawCube	X, Y, Z	This method is used to map texture coordinates with faces of cube.
KeyboardFunc	Key, X, Y	This method takes keyboard keys as input and redisplay the humanoid.

3. Controls Description :-

This part of the documentation explains what are the basic keys used to control the starwars-robot.

Control Keys	Functions
ESCAPE	Quit the program
SPACE	Humanoid goes up in the air and comes down.
r	If the humanoid is in the air using SPACE, then it flies in the air but if it is on the ground then it walks.
w, s, a, d	This keys are used to rotate the camera view up, down, left and right.
c	This key rotates the eyes of the humanoid. It depicts as if the humanoid is dizzy.
o, p	These keys are used to rotate the ground. It depicts as if the world is moving.