

## SEN3301 Semester Project

**Deadline: Dec 22<sup>nd</sup>, 2022. 23:59 (Please check the other deadlines from below)**  
(Strict, no extensions, through itslearning, NOT by email)

### WHACK-A-PSYCHO

You are asked to design a 3-D animation in which 9 psycho movie characters / figures will be randomly going up and down until shot by the user.



You are asked to include 9 characters (each having a different picture), a scoreboard, and a time process bar / clock to be able to see the remaining time.

Each random time, a figure will move up from a random hole. The player might see 1 or more figures at the same time. If the user hits the character (using the mouse) the character gets deleted from the list. For every hit or miss, increase or decrease the score.

- The figures should be 3D cylinders mapped with the figures' picture on it.
- The figures should move up and down with an animation. They should NOT appear instantly.
- The game should finish if the time ends or the characters are all hit.
- The screen design is totally up to you, but the size should be adaptable to all computers.
- Your game should be object oriented using at least a class for the figures to hold their image, position, status, etc.
- You should include mouse rotation and zooming controls in your program so that I can check the output from different angles.

Remember, your program will be evaluated according to 5 programming guidelines which are functionality, efficiency, user-friendliness, self-documentation and elegance.

Good Luck!



**Important Dates:**

Upload No	Due Date	Week	What to upload
Upload #1	Nov 4 <sup>th</sup>	End of week 5	1 <sup>st</sup> screen design with the size and background.
Upload #2	Dec 1st	End of week 9	2 <sup>nd</sup> screen design, psycho characters added to screen. They should be able to move up and down randomly. <i>User doesn't have to shoot for this upload.</i>
Upload #3	Dec 22 <sup>nd</sup>	End of week 12	Finished project
Presentations		13 & 14 / During class hours	Team presentation wrt the announced presentation lists.

You can gather up teams up to 3 students at most. Please remember that every member of the team is responsible from the project. When a question is asked, every team member should be able to answer.

