



## G. Narayanamma Institute of Technology & Science (For Women) (Autonomous)

Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad  
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Shaikpet, Hyderabad-500104

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

<GN-R-18> (2022 - 2023) II B.Tech II Sem Hobby Project  
on "Space Invaders Game"

#### Abstract

The purpose of this project is to implement the arcade game "Space Invaders" using python module pygame. Space Invaders is a stationary shooter in which the player fires at aliens overhead by moving a laser weapon horizontally across the bottom of the screen. The game will involve controlling a player spaceship and shooting down enemy alien spaceships while avoiding their projectiles. The game will feature different levels of increasing difficulty and a high score system to keep track of player progress. As a group, the aliens travel left and right, shifting downward as they approach the screen's edge.

The objective is to shoot all of the aliens to death. The game finishes quickly if the invaders reach the bottom of the screen while the player has five lives. The project will provide an opportunity to learn Python programming, game development concepts, and project management skills. Overall, this project will offer a fun and engaging experience for players while providing valuable learning outcomes for developers.

#### H/W & S/W Requirements

**Hardware Requirements :** i5 processor, 4GB RAM, 64-bit OS, 4GB Graphic Card

**Software Requirements :** Python 3- pygame, IDE(pycharm), Sound and graphics editor

\*Dept R&D: Yes / No

\* If No : GNITS



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