THE HUNGRY SNAKE

Authors
Ravi Shankar Nayak
Arjun Shyam
Abhay Prathap Singh

Name of Degree: ***Bachelor of Technology***

Name of Dept.: ***Computer Science & Engineering***

Name of Faculty: ***Mr. Sagar Pande***

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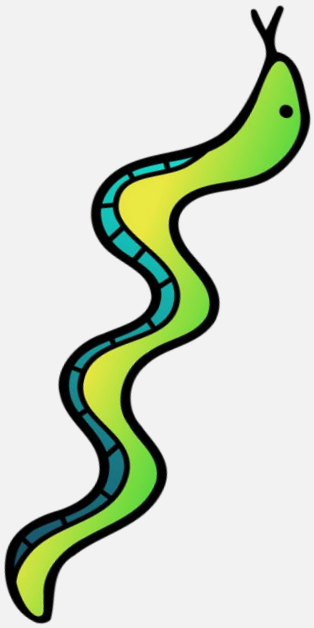
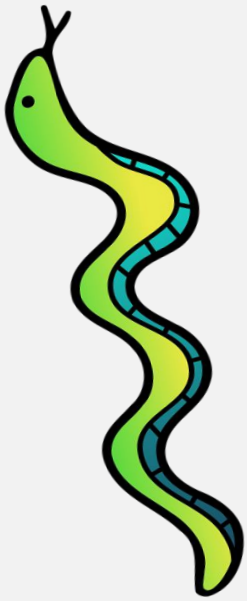


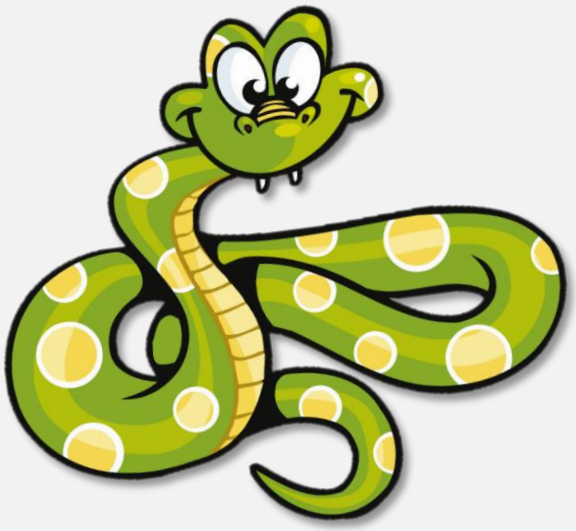


ABSTRACT

This project was developed with at most care and concern by the team members for python programming using Pygame along with our Twilio API Integration.

The Hungry Snake is a world famous and evergreen game, which can be played by anyone of any age [no age restrictions], but we modified this game into a brand new level by merging up the API integration along with the game and last but not least this time we made the game for the ones who love playing a game in its multiplayer version – the Multiplayer version.

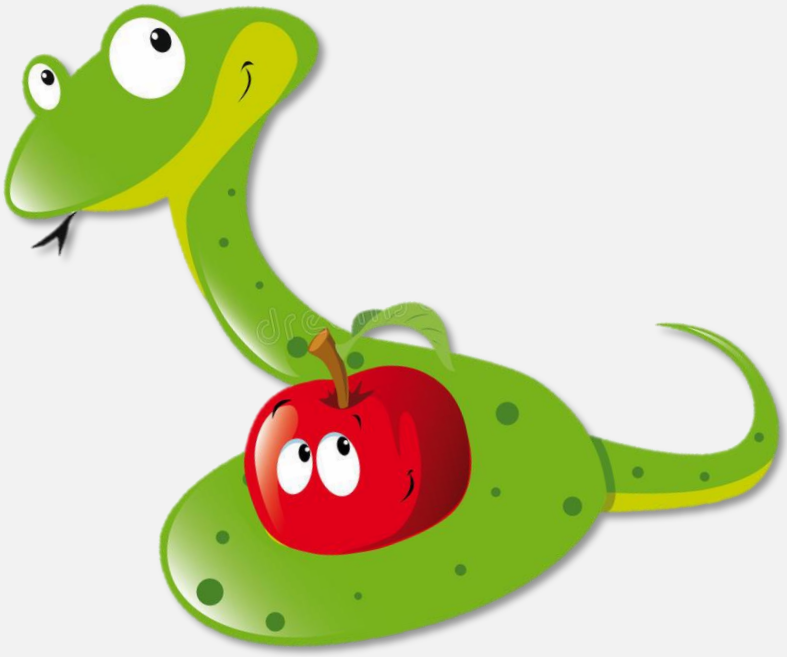
Now all you have to do is give the Hungry Snake your WhatsApp number, select the version – single player or Multiplayer and then rock n roll, and at the end of the game you will receive your score in your given mobile number.



ACKNOWLEDGEMENT

*We would like to express our special thanks of gratitude to our teacher Mr. Sagar Pande Sir who gave us the golden opportunity to do this wonderful project on the topic '**THE HUNGRY SNAKE**', which also helped us in doing a lot of research and we came to know about so many new things, we are really thankful to you sir.*

Secondly, we would also like to thank each one of our parents and friends who helped us a lot in finalizing our project within the limited time frame.

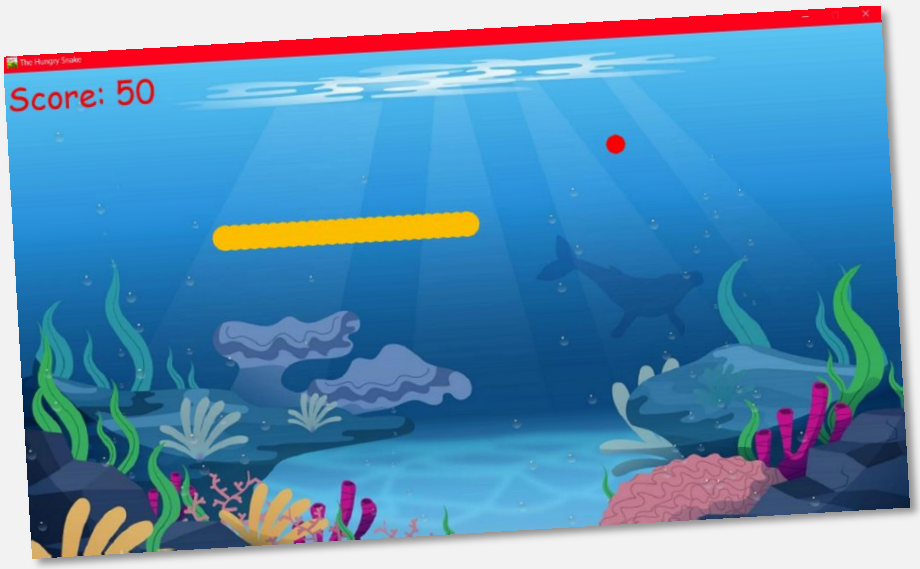


INTRODUCTION

Our goal in this project is to create a multiplayer Snake game having Twilo API integration. This project is totally made with python programming language and pygame module.

Pygame is a cross-platform set of python modules designed for writing video games. By using this, we have developed two categories of the game, one is single player mode and the other is 2-player (multiplayer) mode. It also has a feature of playing or pausing Background music.

It also has the API Integration feature. For this we have used Twilio API Integration. By the help of this, the user receives a WhatsApp message of what score he/she gets after playing this game.



REVIEW OF LITERATURE

Research Article	*"The Hungry Snake" :Multiplayer Snake Game With API Integration*
Research Contributions	*i. Ravi Shankar Nayak* *ii. Abhay Prathap Singh* *iii. Arjun Shyam*
Aim & objectives	*To create a game with multiplayer features with the help of python Language and its libraries. And also to create a connection between the user and the game by using API's.*
Novelty/ Rationale and significance	*i. Two Gaming modes in a single platform* *ii. Two players can play at a time.* *iii. Optimizing communication network using Twilio's application programming interface.*
Implementation Details	*i. Tool: Pycharm. IDLE* *ii. Libraries/ modules: Pygame, Twilio, time, OS* *iii. Images: www.freepik.com*
Findings and Conclusions	*1000's of games gets released a year, including big games and small ones, the matter is not if the game is big or small, what matters the most is if the people loves the game or not, this was our moto; So we made the game as much user friendly as possible along with that, we made it more colorful*
Areas of improvement/ Future findings	*In our next update we will:* *i. Add a new theme to each mode* *ii. Customizable feature for Game settings.* *iii. Convert the .py file into .exe file*

PROJECT CONTRIBUTION

This project would not have been successful without the valuable contribution of the team members.

Their individual contribution is listed below:

1. ***Ravi Shankar Nayak***

   Contribution:

   Single Player Mode, API Integration

   Methods used:

   i. *random.randint()*
   ii. *pygame.event.get()*
   iii. *pygame.draw.circle()*
   iv. *blit()*
   v. *append()*
   vi. *display.update()*
   vii. *clock.tick()*
   viii. *twilio.rest module*
   ix. *Client module of Twilio*
   x. *Client.message.create()*

2. ***Arjun Shyam***

   Contribution:

   Multiplayer mode, Project Report, Project Presentation

   Methods used:

   i. *pygame.event.get()*
   ii. *pygame.mouse.get_pos()*
   iii. *pygame.mouse.get_pressed()*
   iv. *pygame.draw.rect()*
   v. *blit()*
   vi. *fill()*
   vii. *pygame.display.update()*
   viii. *MS Word*
   ix. *MS Powerpoint*

3. Abhay Prathap Singh

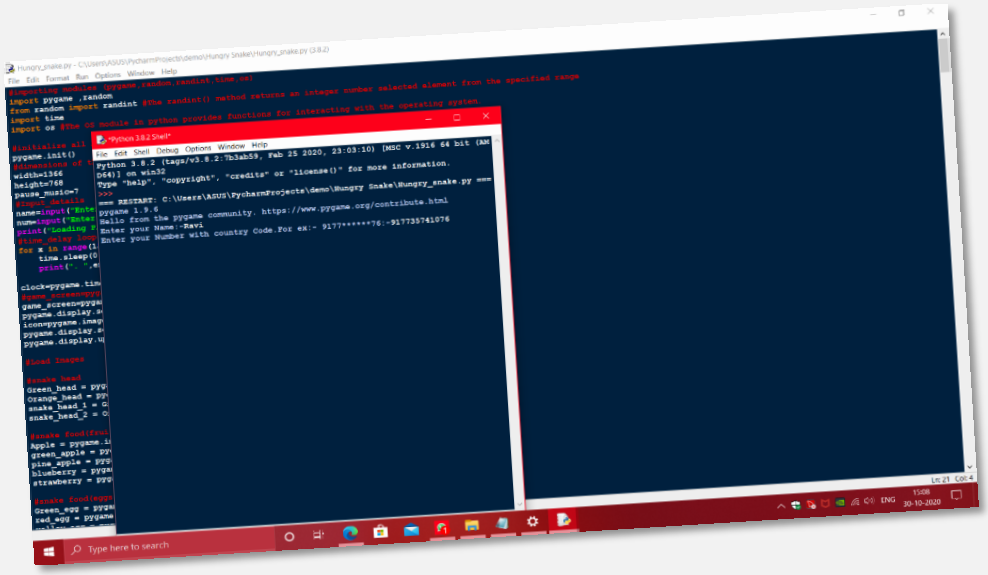
Contribution:

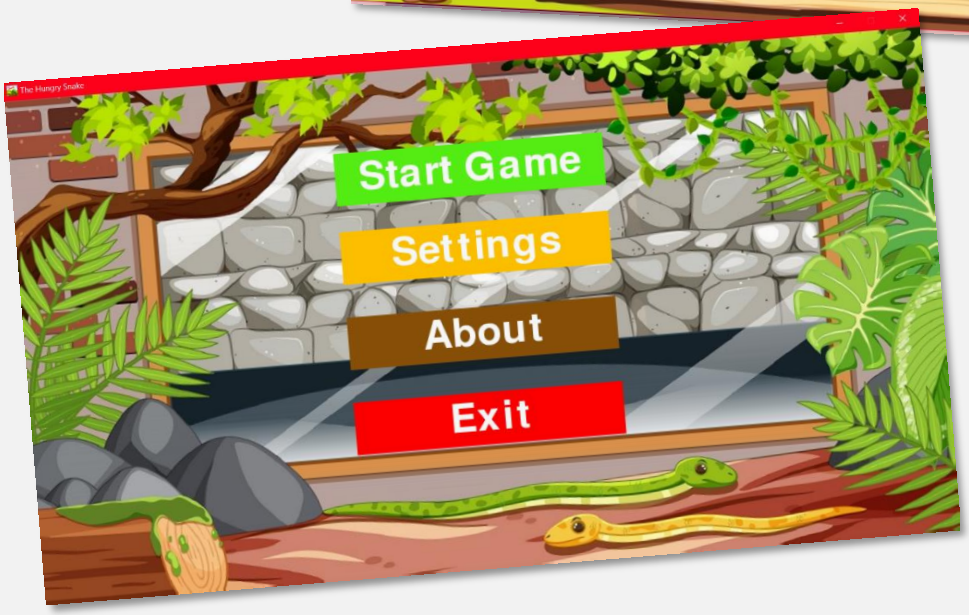
Game Interface, Game Music

Methods used:

i. *pygame.display.set_mode()*
ii. *pygame.image.load()*
iii. *pygame.display.set_icon()*
iv. *pygame.mixer.init()*
v. *pygame.mixer.music.load()*
vi. *pygame.mixer.music.play()*

SCREEN SHOTS





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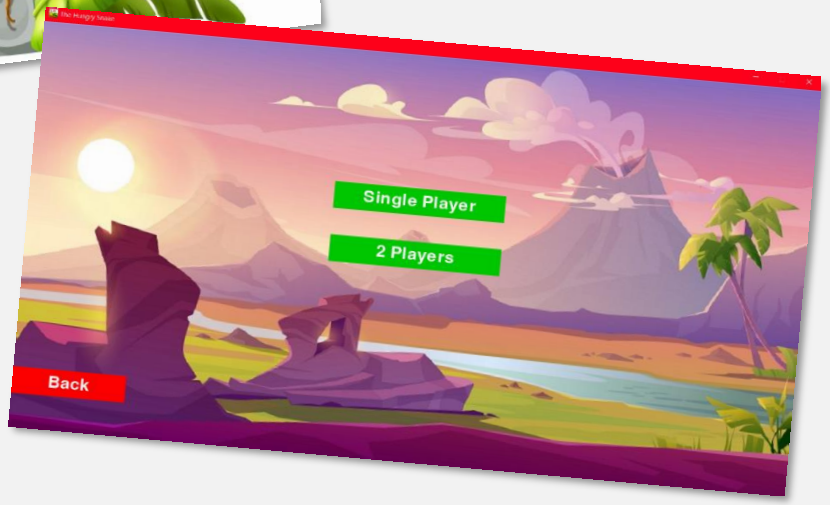
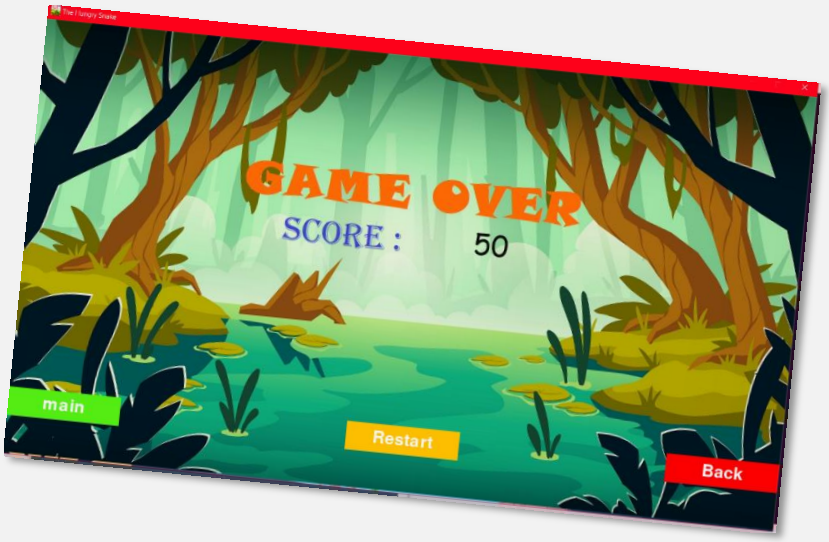
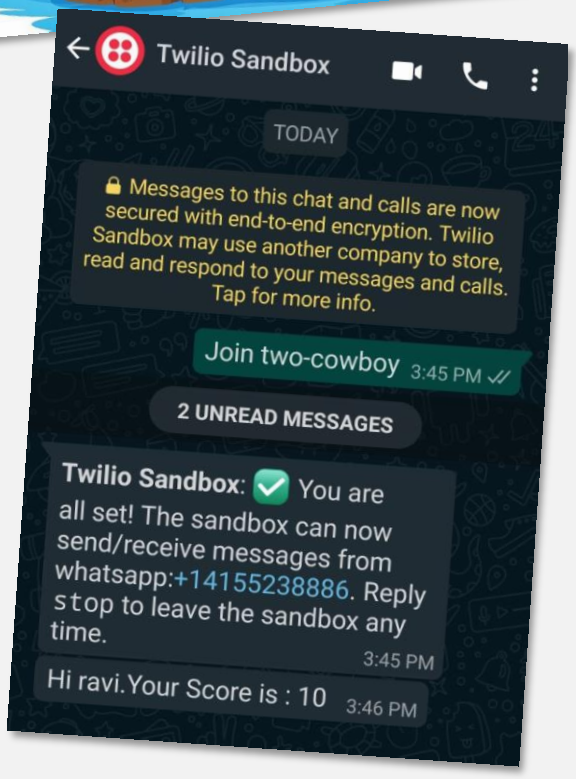
LOVELY
PROFESSIONAL
UNIVERSITY
Transforming Education Transforming India
PROJECT BY:-
RAVI
ARJUN
ABHAY


Single Player
2 Players
Back


GAME OVER
SCORE : 50
main
Restart
Back

[Opening pic]

[Ending Pic]



[Twilio API Integration's message]

BIBLIOGRAPHY

These are the websites we went through in order to make this project:

1. *www.pygame.org*
2. *www.python.org*
3. *www.freepik.com*
4. *www.realpython.org*
5. *www.geeksforgeeks.org/pygame*