



## PYBATTLE GAME USING PYGAME

*Tiara Sachin Kabra<sup>1</sup>, Devarsh Chetan Mehta<sup>2</sup>, Vivek Rajendra Tripathi<sup>3</sup>, Supriya Prem Jha<sup>4</sup>, Swaranjali Jagtap<sup>5</sup>*

<sup>1</sup>Information Technology Dept. Thakur Polytechnic Mumbai-400101, India , tiarakabra@gmail.com

<sup>2</sup>Information Technology Dept. Thakur Polytechnic Mumbai-400101, India , itsmedevarshm07@gmail.com

<sup>3</sup>Information Technology Dept. Thakur Polytechnic Mumbai-400101, India , vivektripathi1095@gmail.com

<sup>4</sup>Information Technology Dept. Thakur Polytechnic Mumbai-400101, India , Jhasupriya615@gmail.com

Subject Guide- Swaranjali Jagtap swaranjali.it@tpoly.in

### ABSTRACT :

The Pygame framework, a popular library for Python programming, provides a versatile platform for creating interactive multimedia applications and games. Leveraging the simplicity and flexibility of Python syntax, Pygame offers powerful functionalities for handling graphics, sound, and user input, making it an ideal choice for both beginners and experienced developers alike. With its extensive documentation, active community support, and cross-platform compatibility, Pygame empowers developers to unleash their creativity and bring their imaginative projects to life with ease and efficiency.:

Keywords - Pygame, python, gaming, user- friendly interface.

### INTRODUCTION :

The Pygame is a versatile Python library that serves as a powerful tool for creating interactive games and multimedia applications. With its intuitive interface and comprehensive set of modules for handling graphics, sound, and user input. Embark on an epic journey through a medieval realm with our simple yet captivating bandit and knight game, built using Pygame. Players will immerse themselves in a richly detailed world where they can choose to embody either a daring bandit or a noble knight, each with unique abilities and quests. With stunning graphics, immersive sound effects, and intuitive controls, this Pygame-powered adventure promises thrilling encounters, strategic decision-making, and endless excitement for players of all ages.

### EVOLUTION OF PYGAME :

#### *Current State*

Pygame remains an actively maintained and widely used library for game development in Python. The library continues to receive updates and support from its community, with occasional releases introducing new features, bug fixes, and optimizations. Pygame's compatibility with modern Python versions and various operating systems ensures its relevance and usefulness for developers seeking to create games and interactive applications. The pygame package represents the top-level package for others to use. Pygame itself is broken into many submodules, but this does not affect programs that use pygame.

#### *Timeline of development*

2000: Pygame was born as a pet project by Pete Shinnars, aiming to provide a simple and accessible way for Python developers to create games and multimedia applications. Its initial release marked the beginning of a journey that would shape the landscape of Python game development.

Early 2000s: Pygame quickly gained traction within the Python community, thanks to its intuitive interface and comprehensive set of modules for handling graphics, sound, and user input. Developers embraced Pygame as a powerful tool for turning their creative ideas into interactive experiences.

2001-2004: During this period, Pygame underwent regular updates and improvements, with developers contributing new features, optimizations, and bug fixes. These efforts helped to expand Pygame's capabilities and solidify its position as a leading game development framework in the Python ecosystem.

2007: The release of Pygame 1.8.0 marked a significant milestone in the library's development. This version introduced several enhancements, including improved font support, better documentation, and critical bug fixes, further enhancing Pygame's usability and reliability.

2012: Pygame continued to evolve with the release of version 1.9.2, which brought support for Python 3.x versions. This update was a crucial step towards ensuring Pygame's compatibility with the latest advancements in the Python language and ecosystem.

2017: Pygame 1.9.4 was released, focusing on refining the library's performance, stability, and compatibility with modern operating systems and hardware configurations. This release demonstrated the ongoing commitment of the Pygame community to maintain and improve the library over time.

2019: The announcement of Pygame 2.0 generated excitement within the community, signaling a new chapter in the library's development. Pygame 2.0 aimed to modernize the framework with improved support for modern hardware and graphics technologies, laying the foundation for future innovation and growth.

2020: Pygame 2.0 was officially released, representing a culmination of years of hard work and collaboration. This milestone release introduced numerous enhancements, including support for hardware acceleration via the SDL2 library, improved audio support, and additional features for game development.

2021-2022: Pygame continued to thrive with ongoing updates and community contributions. Efforts during this period focused on optimizing performance, enhancing documentation, and adding new features to further enrich the development experience for Pygame users.

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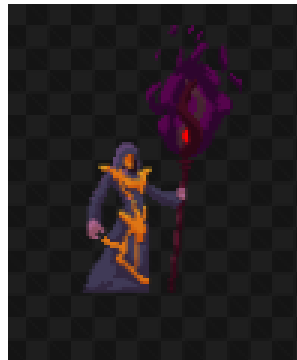
## WORKING OF PYBATTLE :

Fighter 1



**Fig. 1 Warrior**

Fighter 2



**Fig. 2 Wizard**

Game Screen

. Two player game where one player operates through w,a,s,d and another player operates through arrow keys.



**Fig. 2 Game layout**

Move



Fig. 4 Moving

When attacking you can decrease health of the player to win



Fig. 5 Attack

Victory

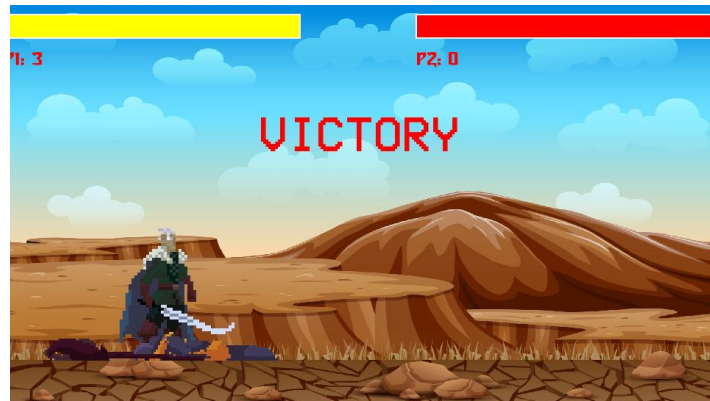


Fig. 6 Victory

Health Bar and Points



Fig. 7 Health Bar and Point layout

## LITERATURE :

It is a two player game where both players operate through keyboard. Both have to defense and attack. As you attack the opposite player it reduces the heath of the player and simultaneously you have to defense. This game notes your points in every round. All the images in the game are made through pixels. It can be used through controllers also as a television video game. We have implemented pygame library in this project. Pygame is a versatile Python library renowned for its ability to facilitate the creation of interactive games and multimedia applications. Equipped with a comprehensive set of modules for handling graphics, sound, and user input, Pygame empowers developers to unleash their creativity and bring their imaginative projects to

life with ease and efficiency. Its intuitive interface, extensive documentation, and active community support make Pygame an ideal choice for both beginners and experienced developers seeking to explore the realms of game development and interactive media in Python.

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## CONCLUSION :

In conclusion, the development journey of our project in Pygame has been both enriching and rewarding. Through meticulous planning, collaborative efforts, and unwavering dedication, we have successfully brought our vision to life, creating an engaging and immersive experience for players. Leveraging Pygame's versatile capabilities, we have crafted a game that not only entertains but also showcases the endless possibilities of Python in game development. As we reflect on the challenges overcome and the milestones achieved, we are grateful for the invaluable lessons learned and the supportive community that has accompanied us every step of the way. Moving forward, we remain committed to refining our project, incorporating feedback, and exploring new avenues of creativity, ensuring that it continues to captivate audiences and inspire future endeavors in the vibrant world of Pygame development.

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## ACKNOWLEDGEMENT :

In the creation of this exhilarating fighter game using Pygame, we extend our heartfelt gratitude to the Pygame development team for providing such a versatile and powerful framework. Additionally, we thank the Python community for their ongoing support and contributions, which have enriched the development process. Special acknowledgment is owed to the countless tutorials, forums, and resources that have guided us along the way, empowering us to craft an immersive gaming experience. Last but not least, we express our appreciation to our players whose enthusiasm and feedback continue to inspire us to push the boundaries of creativity and innovation in game development.

We would also like to thank the testers and players who have enthusiastically participated in the beta testing phase of our game. Their feedback and suggestions have been instrumental in identifying bugs, balancing gameplay, and refining user interface elements. Their dedication and enthusiasm for the game have motivated us to strive for excellence and deliver a polished and enjoyable gaming experience.

Finally, we express our gratitude to our team members for their unwavering commitment, creativity, and collaborative spirit throughout the development process. Their collective expertise and passion have been the driving force behind the creation of this fighter game, and we are proud to present the result of our collective efforts to our players. We hope that this game brings joy, excitement, and entertainment to all who embark on this thrilling adventure in the world of Pygame-powered gaming.

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