**UNIVERSITY OF TECHNOLOGY AND EDUCATION**

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**PROJECT**

*Cat Shooter (Python)*

***Instructing Lecturer*:** **Vu Quang Huy**

***Course****:* *Information Technology for Mechatronics*

**Table of Contents**

[**I.** **Prologue** 3](#_Toc72942663)

[**II.** **Abstract** 3](#_Toc72942664)

[**III.** **Rules & Improvements** 3](#_Toc72942665)

[**IV.** **Demo** 5](#_Toc72942666)

[**V.** **Timeline** 7](#_Toc72942668)

[**VI.** **System Requirements** 7](#_Toc72942669)

[**VII.** **References and Acknowledgments** 7](#_Toc72942671)

# **Prologue**

This game had been made for two purposes only: (1): To be the final project of the course “Information Technology for Mechatronics” using Python and its libraries.

# **Abstract**

Information Technology for Mechatronics has been one of the critical classes that affects the level of any Mechanical Engineering or relevant IT students. Thus, since we have attended the course provided by UTE, I have built a small game serving as the final project for this course which was named “Cat Invader”. This adaptive game was written in Python 3.8 along with some support from built-in modules (time, os, sys, logging, cProfile), threading GUI (PyQt5) and distributed via BSD-3 Open-source License.

# **Rules & Improvements**

* **Class Explanation**:

MainWindow class: serve as a blueprint for the game’s window.

Driven class: contain an instance the MainWindow to run the game

# **Demo**

Do as teacher’s instruction

# **Timeline**

***Table 1****: The working progess*

|  |  |
| --- | --- |
| Day | Progress |
| Jul 16th | Receive topic from the instructor |
| Jul 18th | Initialise the idea |
| Jul 20th | Create drafts, write code, search solutions, cry |
| Jul 22nd | Fixing bugs, finishing the game |

# **System Requirements**

**Minimum Requirements**

* Operating System: Windows 8.1
* CPU: Core i3
* Free Space: 1 GB
* RAM: 1.5 Gb

**Recommended Requirements**

* Operating System: Windows 10
* CPU: Core i3
* Free Space: 1 GB
* RAM: 2 Gb

# **References and Acknowledgments**

* **Packages**: PyQt5
* **Built-in Modules:** os, sys, time
* **Programming Language:** Python 3.8
* **IDE:** PyCharm Pro, VS Code, …
* **Extra Tool:** Adobe Photoshop 2020