
Discovering Knowledge

# COURSE: CSL 113
# COMPUTER PROGRAMMING
# PROJECT REPORT

## CLASS: BSE – 1A/B/C (FALL - 2024)

## Project Title

### Group Members

| Student Name | Enrollment# |
|---|---|
| Urooba Batool (GL) | 02-131242-007 |
| Muhammad Abdullah | 02-131242-070 |
| Afifa Akbar | 02-131242-095 |

### Submitted to:

Course Instructor: Engr. Muhammad Faisal
Lab Instructor: Engr. Noor us Sabah

**Department of Software Engineering**
**BAHRIA UNIVERSITY KARACHI CAMPUS**

## Abstract :

The Vampire Game, developed using C# Windows Forms, is an immersive action-adventure game set in a dark, mysterious world. Players assume the role of a boy, navigating through eerie environments filled with vampires. The game's narrative is rich with suspense, where players uncover the secrets of a hidden, supernatural realm while engaging in fierce fights with other creatures of the night.

The game features interactive graphics, allowing players to strategically use their abilities to defeat enemies and overcome challenges. Alongside the main storyline, players also participate in various puzzles, such as fire-related challenges, which add an extra layer of excitement and complexity to the gameplay. These mini-puzzles provide moments of intensity, testing the player's reflexes , decision-making skills and player’s IQ.

The atmosphere of the game is one of its key highlights, with carefully crafted visuals that contribute to a chilling and immersive experience. Players can expect unexpected twists and turns as they progress through the game, facing new dangers and uncovering hidden mysteries.

Overall, the Vampire Game is designed to engage players through its captivating storyline, atmospheric settings, and interactive mechanics, offering a unique and thrilling experience for all fans of action-adventure games.

# TABLE OF CONTENTS

# 1. INTRODUCTION :

The video game industry has become a powerful platform for exploring creative narratives, decision-making scenarios, and player-driven storytelling. "Vampire Epidemic: The City Crisis" is a game that integrates a survival narrative set in a city under siege by vampires. The protagonist faces a life-altering decision: Should they go to college and risk vampire encounters on the way, or should they stay home and deal with the vampire attack at their doorstep? The game will feature two primary paths with branching outcomes based on the player's choices.

The game is developed in C# using Windows Forms for the user interface, making it ideal for a Windows-based platform. It will allow players to engage in both strategic decision-making and survival gameplay, where each choice impacts the unfolding narrative.

# 2. PROBLEM STATEMENT :

The problem at the core of this project is creating a compelling narrative-based game in which the player must make meaningful decisions under pressure. The main challenge lies in designing an engaging survival game using Windows Forms while incorporating various decision points where player choices will influence both the plot and the game environment. The game must blend the tension of managing everyday concerns (attendance) with the ever-present threat of supernatural attacks.

Further, this game aims to build a simple yet immersive experience using limited resources. Designing the game's logic, interfaces, and interactions while maintaining user engagement in a non-3D environment (Windows Forms) presents an additional challenge.

# 3. PROPOSED SOLUTION

### 3.1 Features of the project:

- **Two Decision Paths:** Players must decide whether to attend college and risk an encounter with vampires or stay home and deal with the vampire attack.
- **Multiple Outcomes:** The game will have different endings based on the player's choices, increasing replay value.
- **Survival Gameplay:** Players will have to escape vampire attacks, manage resources, and navigate the city or their home.
- **Dynamic Decision-Making:** The game will feature a branching narrative where each choice has consequences that affect both the gameplay and story progression.
- **Simple UI Design:** The interface will be designed with Windows Forms, featuring clickable buttons, pop-up messages, and inventory management elements.

### 3.2 Methodology:

The development process will follow the traditional game development lifecycle, including the following phases:

- **Conceptualization and Design:** Define the gameplay mechanics, narrative structure, and decision points. Develop the basic flow of the game and identify key scenarios.
- **Coding:** Create a basic prototype using Windows Forms to simulate decision-making and story progression.
- **Development:** Implement features using C#, including story branching, event handling, and simple animations. Develop the game logic for both the college and home paths.
- **Testing:** Main focus that choices lead to appropriate outcomes and debugging the errors.

### 3.3 Technologies used:

- **C# Programming Language:** For the primary game development and logic implementation.
- **Windows Forms:** For creating the graphical user interface (GUI) and handling user input, forms, and interactions.
- **Visual Studio Code:** As the integrated development environment (IDE) for coding, debugging, and building the application.
- **.NET Framework:** For handling basic game mechanics like time tracking, event handling, and data storage.
- **Graphics:** Basic 2D images, icons, and text-based graphics will be used to represent characters, locations, and events.

# 4. PROJECT SCOPE :

### 4.1 Project Overview

- The game centers around a vampire epidemic spreading through a city or town, where players must navigate challenges, uncover mysteries, and find a cure or escape.

- The story can be shaped around the player's choices, incorporating survival elements, strategy, and combat.

### 4.2 Objectives

- **Story Development**: Craft a compelling narrative where players experience the rise and impact of a vampire epidemic.

- **Player Choices**: Implement choices that influence the game's outcome (e.g., curing the epidemic, becoming a vampire, escaping, etc.).

### 4.3 Gameplay Features

- **Character Development**: Allow players to build and level up characters with different skills and abilities, such as combat, stealth, or healing.

- **Mini-games**: As you mentioned, integrate mini-games related to fire and other elements as challenges for the player.

- 

### 4.4 Game Environment

- **Atmosphere**: Implement interactive graphic to the game to make a user friendly environment.

### 4.5 Technical Requirements

- **Platform**: Decide whether it will be a Windows-only game or cross-platform, depending on your target audience.
- **Development Tools**: C# and Windows Forms or another game engine like Unity if you aim to expand features.

### 4.6 Potential Challenges

- Balancing the complexity of the epidemic and player choices.
- Managing game performance as the map and interactions grow.
- Implementing AI for NPCs that reacts realistically to the epidemic's spread.

# 5. MODULE DISTRIBUTION :

Urooba Batool ---- Graphics and windows form

Afifa Akbar ---- Random Functions and Methods

Muhammad Abdullah --- if-else conditions

# 6. CODE :

```
public Form1()
    {
     InitializeComponent();
     veSlide1.Visible = false;
     userName.Visible = false;
     enterName.Visible = false;
     submitBtn.Visible = false;
     veSlide2.Visible = false;
     n1.Visible = false;
     quit.Visible = false;
     counter.Visible = false;
     veText1.Visible = false;
     stayAtHomeSlide1.Visible = false;
```

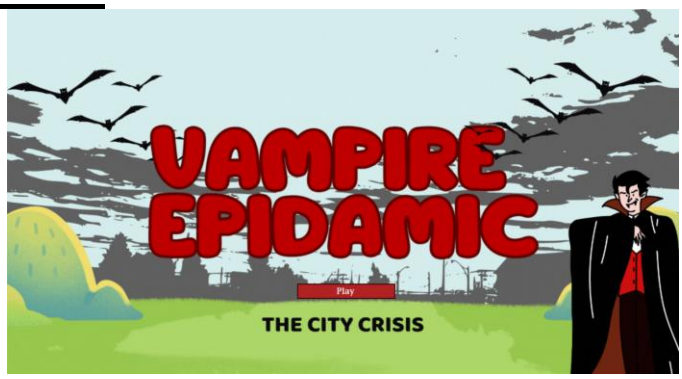
```
        sahText1.Visible = false;
        startBtn.Visible = false;
        stayAtHomeSlide2.Visible = false;
        sahText2.Visible = false;
        answer1.Visible = false;
        sahText3.Visible = false;
        stayAtHomeSlide3.Visible = false;
        garlicIncText.Visible = false;
        bedroomSlide1.Visible = false;
        answer2.Visible = false;
        submit1.Visible = false;
        garlicDecText.Visible = false;
        sahText4.Visible = false;
        answer3.Visible = false;
        sahText5.Visible = false;
        sahText6.Visible = false;
        stayAtHomeSlide4.Visible = false;
        submit2.Visible = false;
        submit3.Visible = false;
        stayAtHomeSlide5.Visible = false;
        answer4.Visible = false;
        sahText7.Visible = false;
        sahText8.Visible = false;
        submit4.Visible = false;
        answer5.Visible = false;
        sahText9.Visible = false;
        sahText10.Visible = false;
        stayAtHomeSlide6.Visible = false;
        submit5.Visible = false;
        sahText11.Visible = false;
        sahText12.Visible = false;
        sahText13.Visible = false;
        sahText14.Visible = false;
        answer6.Visible = false;
        answer7.Visible = false;
        stayAtHomeSlide7.Visible = false;
        stayAtHomeSlide8.Visible = false;
        submit7.Visible = false;
        stayAtHomeSlide9.Visible = false;
        submit6.Visible = false;
        answer8.Visible = false;
        sahText15.Visible = false;
        sahText16.Visible = false;
        stayAtHomeSlide10.Visible = false;
        submit8.Visible = false;
        stayAtHomeSlide11.Visible = false;
        submit9.Visible = false;
        hideBtn.Visible = false;
        dontHideBtn.Visible = false;
        sahText17.Visible = false;
        survivedText.Visible = false;
        survived.Visible = false;
        attacked.Visible = false;
        restart.Visible = false;
}
```

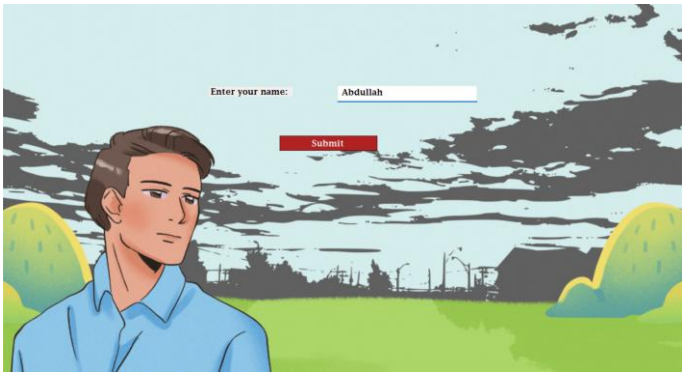
```
    private void garlic_riddle()
    {
```

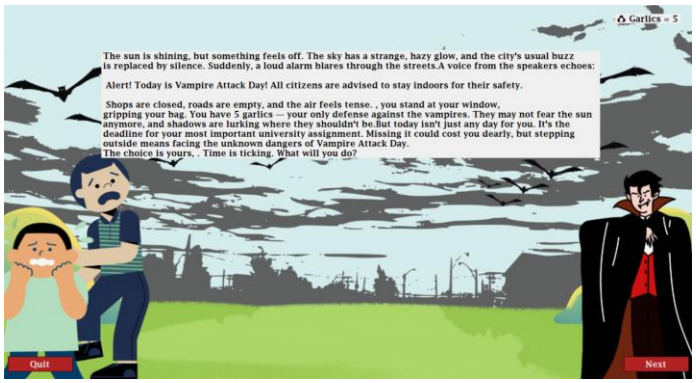
```
    answer2.Visible = true;
    sahText3.Visible = true;

    string[] riddles = { "I’m white as snow, cold as ice, and my touch makes vampires think
twice.\nWhat am I?", "I have a strong smell, white and small. Vampires fear me most of
all.\nWhat am I?", "I grow in the ground, my scent is strong. To keep vampires away, I
belong.\nWhat am I?", "I’m used in food to add some zest, but vampires think I’m far from
the best.\nWhat am I?", "I’m a clove, but not for love. Vampires fear me from above.\nWhat
am I?", "Hang me by the door, I’ll do my trick. Vampires won’t come near, not even a
lick.\nWhat am I?", "I’m white and pungent, I make you tear, but to vampires, I’m their
biggest fear.\nWhat am I?", "I’m used in sauces, soups, and bread, but I keep vampires filled
with dread.\nWhat am I?", "I’m a kitchen staple, it’s clear, but I’m also a vampire’s worst
fear.\nWhat am I?", "My smell is strong, I’m not a delight, but I keep vampires away at
night.\nWhat am I?", "I’m not a weapon or a spell, yet I keep vampires away so
well.\nWhat am I?" };
    Random random_riddle = new Random();
    int index_num = random_riddle.Next(riddles.Length);


    sahText3.Text = riddles[index_num];
    answer2.Text = "";
}


private void submit1_Click(object sender, EventArgs e)
{
    if (string.IsNullOrWhiteSpace(answer1.Text))
    {
        MessageBox.Show("Complete task "+t_num);
    }
    else
    {
        stayAtHomeSlide2.Visible = false;
        sahText2.Visible = false;
        answer1.Visible = false;
        submit1.Visible = false;

        attack();
        t_num += 1;
        if (answer1.Text == "Kitchen" || answer1.Text == "KITCHEN" || answer1.Text ==
"kitchen")
        {
            //task 02
            stayAtHomeSlide3.Visible = true;
            sahText4.Visible = true;
            submit2.Visible = true;
```

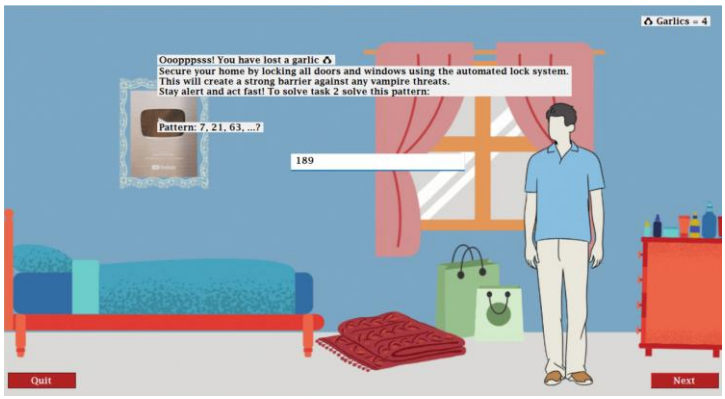
```
            garlic_inc();
            garlic_riddle();
            sahText4.Text = "To protect your home, sprinkle garlic powder at the front door. This barrier\nwill keep lurking vampires away. Act quickly and carefully—your safety \ndepends on it! Solve the riddle to complete the task" + t_num + ":";

            sahText4.Parent = stayAtHomeSlide3;
            sahText3.Parent = stayAtHomeSlide3;
            garlicIncText.Parent = stayAtHomeSlide3;
            answer2.Parent = stayAtHomeSlide3;
            counter.Parent = stayAtHomeSlide3;
            quit.Parent = stayAtHomeSlide3;
            submit2.Parent = stayAtHomeSlide3;
        }
        else
        {
            //task 03
            bedroomSlide1.Visible = true;
            sahText5.Visible = true;
            submit3.Visible = true;

            garlic_dec();
            pattern_riddle();
            sahText5.Text = "Secure your home by locking all doors and windows using the automated lock system.\nThis will create a strong barrier against any vampire threats.\nStay alert and act fast! To solve task " + t_num + " solve this pattern:";

            submit3.Parent = bedroomSlide1;
            garlicDecText.Parent = bedroomSlide1;
            sahText5.Parent = bedroomSlide1;
            sahText6.Parent = bedroomSlide1;
            answer3.Parent = bedroomSlide1;
            counter.Parent = bedroomSlide1;
            quit.Parent = bedroomSlide1;
        }
    }
}
```

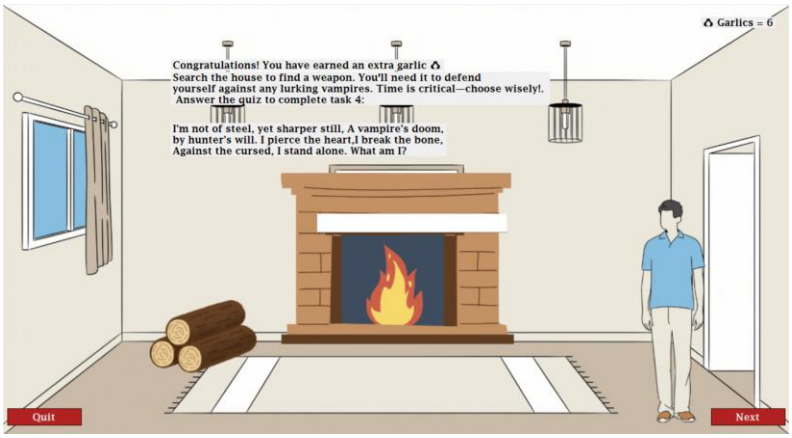
# 7. INTERFACES :




♻ Garlics = 6
Congratulations! You have earned an extra garlic ♻
Search the house to find a weapon. You'll need it to defend
yourself against any lurking vampires. Time is critical—choose wisely!.
Answer the quiz to complete task 4:
I'm not of steel, yet sharper still, A vampire's doom,
by hunter's will. I pierce the heart,I break the bone,
Against the cursed, I stand alone. What am I?
Quit
Next


Congratulations! You Survived the Day
Play Again


Attacked by the Vampires!!
you did't survive the day
Play Again

# 8. CONCLUSION :

"Vampire Epidemic: The City Crisis" is a survival-based narrative adventure where players must navigate a city under siege by vampires who no longer fear the sun. With the city on high alert, the player's primary objective is to survive until the day's end, relying on a crucial resource: garlic. Maintaining a minimum of two units of garlic is vital for fending off vampire attacks and avoiding a game over. The gameplay blends strategic resource management with dynamic decision-making, as player choices influence both the narrative and their survival chances. Through various tasks and challenges, including riddles and quick decisions, players can earn or lose garlic, adding a layer of risk and reward. The constant threat of daylight vampire encounters creates a tense atmosphere, making every decision critical in the fight for survival.

# 9. REFERENCES :

**Websites:**


- Vampires survivors.
- Brain games IQ challenge


**Tools:**


- Visual Studio 2022 (for code)
- Canva (for graphics)