



# AI Development for Survival Horror Game - LYDIA

Lydia is a survival horror game about uncovering the story of player's twin sister - Lydia.

The game happens in a deserted hotel that was built by the church where Lydia could be recalled by her **scattered memory pieces**.

It's a dark time loomed with **Black Death** and mouse carrying deadly virus have taken control of almost everywhere.

How would the player recall her memory with Lydia in such dire situations, maybe with the help of her friend Crimson the Cat?

## Project Highlights:

**Behavior Tree** is chosen as the core technique to develop powerful and flexible AI.

A **Difficulty System** is developed to dynamically adjust the difficulty of the game, maneuvering menace level to boost player engagement.

Additionally, **K-Means Clustering** is used to solve a specific problem for the enemy AI to better predict player intentions.