VNUHCM - University Of Science

Faculty of Information Technology

PROJECT REPORT

Course: Object-Oriented Programming

Game Project: CROSSING ROAD

Theory Teacher: Dinh Ba Tien

Lab Teacher: Truong Phuoc Loc - Do Nguyen Kha

DECEMBER 08, 2021

❖ **Members list:**

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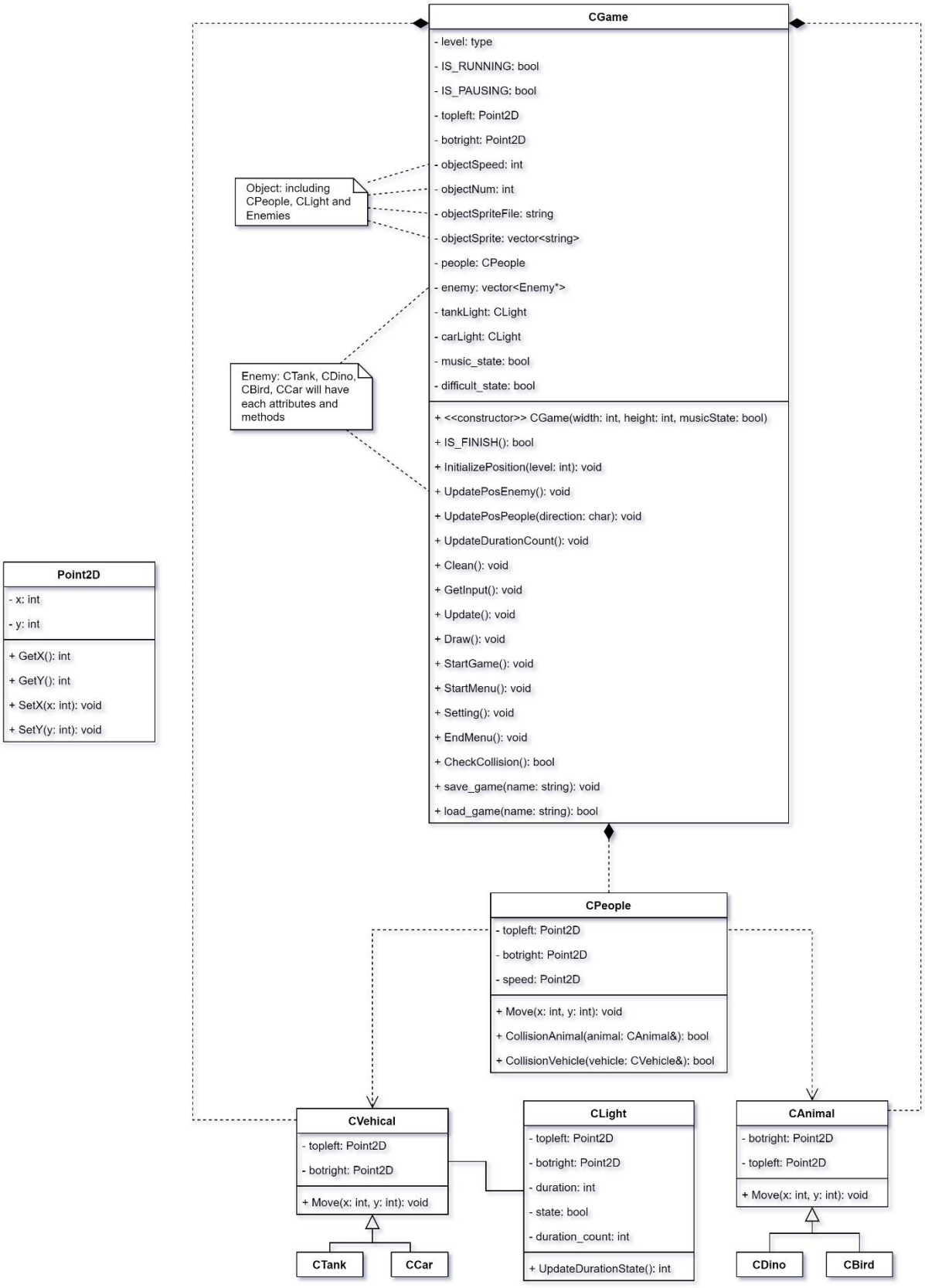
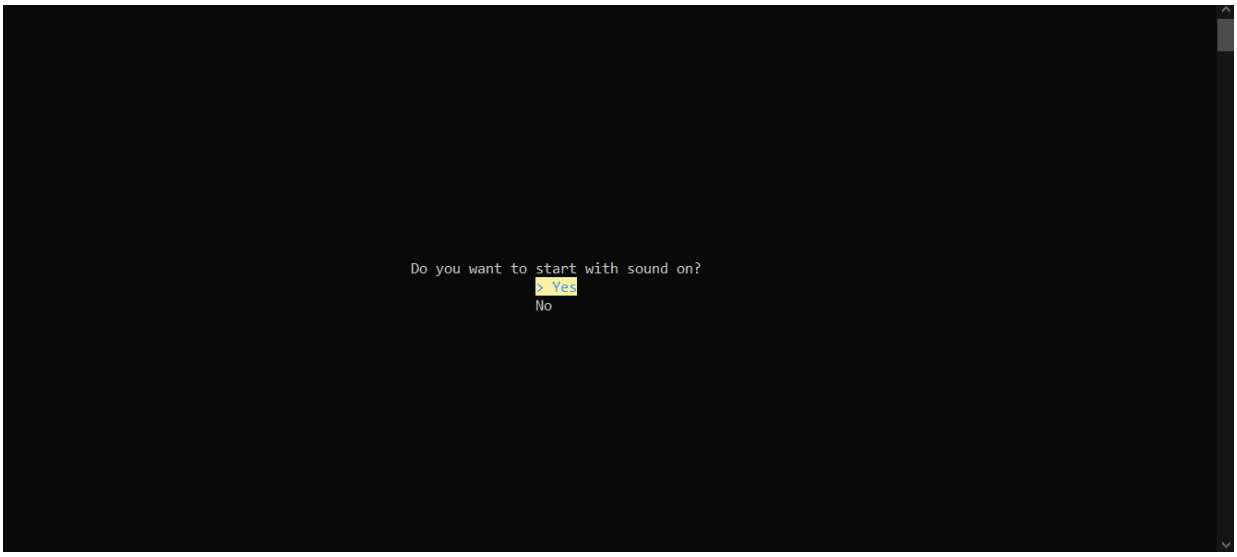
1. Class Diagram of the whole system.



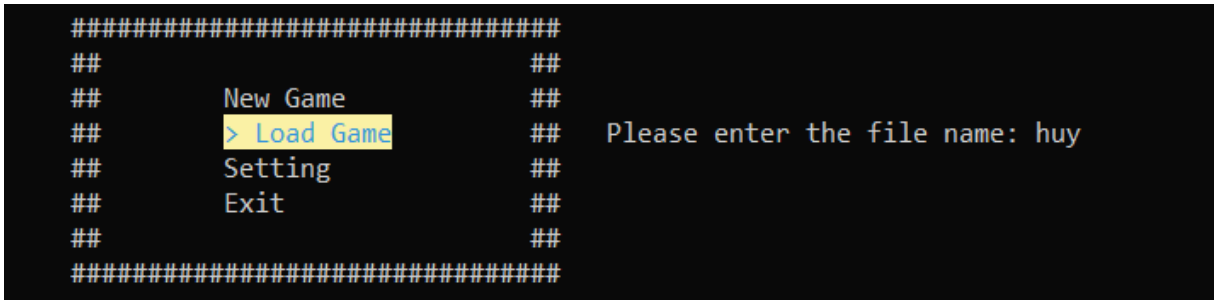
2. Game manual.

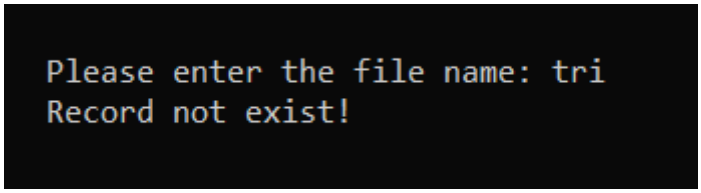
IMPORTANT: before opening the .exe file, be sure to put it in the same folder as the .wav and .txt files (so that the game can read data properly)

- When open, the game will ask you whether you want to start with sound. Pick your option with a/s then enter to select.



- Then you will be moved to the start menu. Here we have 4 options:
  - Start game: start afresh game from level 1.
  - Load game: open a record
    - The game will ask you to type in the name of the record you saved. If it successfully opens the record. There will be a loading screen, else there will be a message.



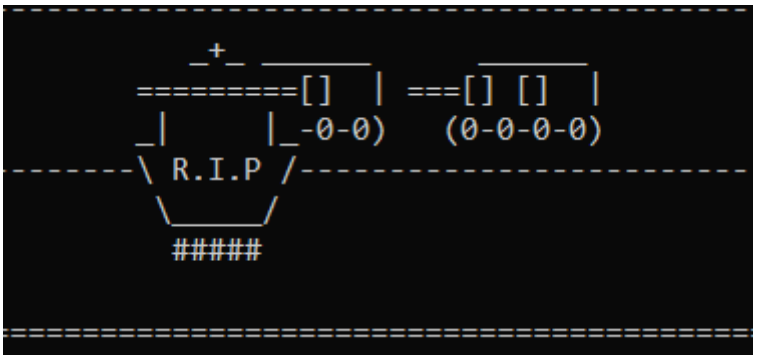


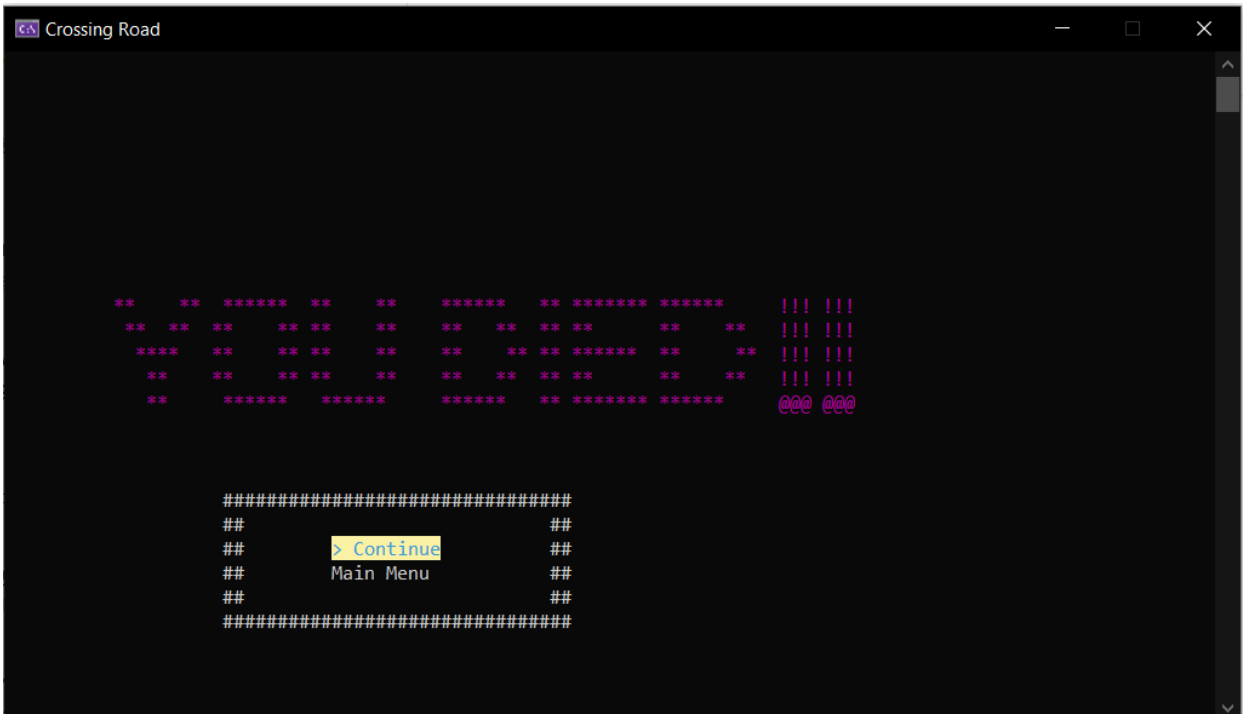
- Setting:
  - MODE: easy / hard, which will affect gameplay
  - SOUND: on / off, turn on / off sounds
  - BACK: back to start menu

- Exit: Leave the game

❖ While playing:
- Press w/a/s/d to move up/left/down/right.
- Try to dodge obstacles.
- Cars and tanks have traffic lights, you may want to use that to your advantage.
- If you get to the other side, you will level up and the game becomes harder.
- Press P to pause.
- Press O to save (the game will ask you to type in a name).
- Press L to load (the game will ask you to type in a name).
- Press K to go back to the start menu.

- If you hit an obstacle:
  - There will be sound of thing you hit being play, your character will be replace with a graveyard. Then after a while, you will go to the end menu. There are 2 options:
    - Continue: play again (from level 1).
    - Main menu: back to start menu.




Crossing Road
> Continue
Main Menu

Crossing Road
Back to Main Menu
40%

3. Assigning Tasks to Team Members.

Full name	MSSV	Tasks
Nguyễn Võ Minh Trí	20127364	+ Code DrawBorder() to create playing menu structure + Code CheckCollision() to check for collision with enemies + Code drawTitle() to display title + Code StartMenu() to display start menu + Code Setting() for difficulty and music options + Code EndMenu() to display death menu + Code RIP() to display player death sprite + Code LoadingScreen () to display loading progress
Lê Hoàng Khanh Nguyên	20127679	+ Design sprites + Code SaveGame, LoadGame for .txt files + Implement threading + Implement CLight class and update related functions to make functional traffic lights + Code Draw function for sprites + Add sound effect for collision, stage success and background music
Bùi Gia Huy	20127032	+ Implement CPeople, CAnimal, CVehicle classes + Code update position functions for enemies + Code SaveGame, LoadGame for binary files + Code Clean() for vector cleaning + Implement music option in StartWithSound() + Revise and compile code
Nguyễn Minh Quang	20127605	+ Implement CCar, CTank, CBird, CDinosaur classes + Prepare initial values for CGame, set border + Set sprite files and sprite vectors + Initialize enemies' position and speed + Implement difficulty option in Setting() + Code StartGame() to initialize a game + Code GetInput() for playing menu + Code enemies' destructor + Code IS_FINISH() so game can finish a level and advance to the next + Revise and compile code