# **Project Proposal Template**

Here is the proposal template, which must be validated your lecturer before starting the development.

Replace grey text with your own information.

#### Project Title

SNAKE NOKIA

#### Project Type

[ X ] Game Project

[ ] Resource Management Project

#### Team Members

Vorng Viseth, Chhem Bunnak

#### Project Description

“SNAKE NOKIA” is a game that is based on the snake game on nokia phone that we use to play. This game let you control the snake from a top-down view and navigate the map and try to collect points in order to grow bigger but wait, there’s a catch.

#### Project Data

#define GRID\_CELL\_SIZE 20 // we create a grid for our game, one cell of the grid is 20 \* 20 pixel

#define GRID\_HEIGHT 30 // grid height is 30 cell

#define GRID\_WIDTH 40 // grid width is 40 cell

#define WINDOW\_HEIGHT (GRID\_CELL\_SIZE \* GRID\_HEIGHT) // screen output height

#define WINDOW\_WIDTH (GRID\_CELL\_SIZE \* GRID\_WIDTH) // screen output width

typedef struct { // position on the grid

int x;

int y;

} Position ;

typedef struct{

Position body[GRID\_WIDTH \* GRID\_HEIGHT]; // snake max length(Whole Grid or Window)

int length; // snake length

int direction; // direction for the snake 1. up 2. down 3.right 4. left

int newDirection;

TPixel color; // snake color

int health; // snake health bar (for the boom)

int score; // score that we collect

bool dead; // check if the snake is dead

bool alive; // check if the snake is alive

bool moved; // check if the snake moved before checking the collision

} Snake;

typedef struct { // can be food or boom

Position objPosition; // where the food will be spawn

bool eaten; // check if food is eaten or not

char type; // (B)oom, (F)ood

} Object ;

typedef enum { // different state during the game

MENU,

SINGLE\_PLAYER,

MULTIPLAYER,

GAME\_OVER,

} GameState;

#### Project Features

List at least 4 core features your project will include.

- customizable skin color

- solo mode

- multiplayer mode ;

-speed up

#### Team Contribution Plan

Who is doing what? How will you divide the tasks?

* Viseth : will handle the game structure.
* Bunnak : will handle the multiplayer mode(on the same device).

If there’s time we will try to make a socket, so that we can play on different devices when on the same local network (if have time)

#### Additional information

Any diagram, draw to illustrate your project if needed