

# CS1372 Summer 2009 Homework 4: Frogger

This Assignment is due via T-Square Thursday, June 11 at 11:55pm

## Purpose

This assignment is to make sure you have an understanding of bit operations, program flow, and structures. It will also quiz your knowledge of classic arcade games.

## Instructions

Write a clone of the game Frogger for the GBA. Your gameplay must include the following:

1. One road and one river with a median in between. The median is a safe area where there are no cars or logs.
2. The road and river should have at least three lanes of objects. At least one of the lanes should have traffic moving in the opposite direction of the other.
3. Just like in the real game, getting hit by a car loses a life. In the river, falling in loses a life. So, in the river, the frog must move on top of the logs.
4. The player should have at least three lives.
5. Finally, there must be at least four “goal” spaces at the top. The game is won when each space is filled with a frog. The game is lost when the player loses all lives.

For program structure, you should include the following:

1. Structures for the logs and cars.
2. Auxiliary function for performing common tasks.
3. Clear segments in your code for performing different tasks.
4. More than one C file.
5. COMMENTS!
6. MORE COMMENTS!
7. Modes 3 and 4.
8. A title screen which wait for the user to press start to begin the game.

Submit all C files, header files, and your makefile on T-Square.

As before, include the following in the top of your main file:

```
////////////////////////////////////
// Name:                                     //
// Prism Account:                           //
// Collaboration:                           //
//   "I worked on the homework assignment alone, using only //
//   course materials."                     //
//           or                             //
//   "I received outside aid on this assigned from the following //
//   person(s):                             //
////////////////////////////////////
```