Requirement Analysis

Case:

Client	ICESI University		
User	Player		
Functional Requirements	R1: Add userR2: Frog actionsR3: Ask for help		
Problem Context	The company Discre has commissioned him to develop "Froggish", a unique and challenging graphical game. The game consists of one level with two different stations. In addition, it features an energy mechanism in which jumping on a leaf consumes energy and landing on a lotus flower replenishes it. Players must guide the frog through these levels, making strategic decisions to get it back home. "Froggish" combines strategic skills in an engaging and entertaining environment.		

Identifier and Name	R1: Add user		
Summary	The software allows to add one user per game, the user will only need the username and the name you want to give to the frog		
Input	Input name	Data type	Valid condition
	username	String	Maximum 20 characters
	frogName	String	Maximum 10 characters
Result or Postcondition	The system verifies that the user is added correctly The system verifies that the user added the frog name correctly		
Output	Output name	Data type	Format
	message	String	The user name was added correctly
	message	String	Frog name added correctly

Identifier and Name	R2: Frog actions			
Summary	The software allows the user to perform actions with the mouse, so that the frog jumps to a leaf or a lotus flower.			
Input	Input name	Data type	Valid condition	
	Click	MouseEvent	Only valid for the mouse, no keystrokes are allowed.	
Result or Postcondition	The frog changes vertex and energy is subtracted if it is a leaf, if it is a lotus flower, energy is added. The frog does not change its vertex and energy is subtracted if it is a leaf, in case it is a lotus flower, energy is added.			
	Output name	Data type	Format	
Output	Message	String	If it is a leaf "You are challenged with 1 amount of energy". If it is a lotus flower "It has had 1 amount of energy added to it".	

Identifier and Name	R3: Ask for help		
Summary	The software provides users with the ability to request assistance when needed. It uses Dijkstra's algorithm based on the graph structure to help users make sound decisions in choosing their next vertex. However, it is important to note that the help available is limited.		
Input	Input name	Data type	Valid condition
	help	Button	available support is limited.
Result or Postcondition	The system checks the shortest path correctly The system verifies the availability of aids, if you have aids available, the system displays the following message "you have n aids available" otherwise the system displays "You have no more aids available".		

Output	Output name	Data type	Format
	message	String	"you have n aids available"
	message	String	"You have no more aids available"