

Team GSJ

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CSCI 205 Final Project

User Manual

We implemented the game “Frogger”, in which the goal is for the user to try to get the frog to the opposite side of the road and river. While moving across the road, there are cars moving in both directions that the frog has to avoid. If the frog gets hit by a car, it must start over. Along the river there are logs and turtles moving across. The frog must land on a log or turtle in order to be safe. If it falls in the river, it must restart. Therefore, the challenge for the user is to get the frog to the other side safely while accumulating a high score. This challenge is faced in the form of a game for the user.

The game Frogger was first invented in the year 1981. It was created by the Japanese video game developing company Konami before being published by Sega. The original idea for the name was “Highway Crossing Frog” but then it was changed to “Frogger.” Originally, it was an arcade machine, but in 1983 Sega released a version of Frogger for home computers. Because of its popularity, many companies began developing different sequels, such as the first one called “Frogger II: Three Deep.” The most common and current online version is implemented in the same way as the original arcade game. It incorporates a road with cars, and a river with logs and turtles moving across it. Each time a frog is moved to the other side, it must be placed on an available lily pad. Once all lily pads are filled, the user moves on to the next level. The user is given three lives in order to try to get to as high of a level as possible. Each level up that the user encounters, the logs, turtles, and cars move faster. Also, in this version new creatures are added in such as a snake that kills the turtle. Once the frog dies too many times (all of the lives are gone) the game is over. This implementation that we just described can be accessed at this link: <http://froggerclassic.appspot.com/>

This implementation is the one that our project is based off of. We chose this version to base our game off of for multiple reasons. First, is that it represents the game in its original form. We liked this version initially because of the clean and cool graphics. It is very easy to see where the frog and other objects are on the screen. Also, it is very clear what the goal of the game is. The main reason we chose to adapt this implementation is because of the added complexity to the game. For example, we really liked the idea of giving the user multiple lives and allowing the user to move on to higher levels. Also, there is a score being kept, which we also incorporated in our game. Overall, we used this pre-existing game as inspiration but also took the game in our own direction as well.

When our game is first opened, a start screen appears and a fun song starts playing. It welcomes the user and gives the user a choice. This options is either beginner or expert. These two difficulties differ based on how fast or slow the cars, logs, and turtles move. In expert mode, the objects move much faster than in beginner mode. Finally, the user can choose to either start the game or exit. The exit button terminates the game. The start button loads and then brings the user to the game screen where they can begin playing the game. In the game, the user can move the frog using the direction keys. The frog must first pass through the street and avoid hitting cars, then the frog must pass through the river by moving on and off of logs and turtles. At the end, the frog must land on a lily pad that is unoccupied. If at any time the frog hits a car, the river, or an occupied lilypad, the frog will either restart at the bottom of the screen and lose a life or it will die if all lives are gone. Every user starts with 4 lives. The score increases by 10 points every time the frog moves upwards. However, if the frog moves up, then down, then up again, the 10 points for that upward movement will only be counted once. When all 5 lily pads are filled, the user moves on to the next level. Every time a new level begins, the user gets a 500 point bonus. When the user is out of lives and “dies,” an end screen appears. On the end screen, the user’s score is displayed. Also, a list of the all-time top scores are

displayed. If the user reached a score that beats any of the high scores, then their score will appear on the list in bold. Also, there is a “play again” button that will bring the user back to the start menu. They can choose again which difficulty they want, and the game will restart from the beginning with a new score and new lives. If the user does not select to try again, the game is over, the window closes, and the music stops playing.

To play the game, the user selects which option it wants on the start screen (beginner or expert) and clicks the “Start” button. After the game loads, the user is free to move the frog using the arrow keys (up arrow moves the frog up, right arrow moves it to the right, etc.). When the frog is moving on the road, it can not travel off screen. However, when it is riding a log or a turtle, if the object it is riding moves off of the screen, then the Frog will continue to ride with the object and both will appear on the other side of the screen but in the same row. The score increases as the frog is moved up the screen, and the higher the score the better.

