**River Crossing**

River crossing is a IQ logic puzzles and fun brain games.

In this fun and challenging game, you will find a complete collection of all known river crossing logic problems, plus some completely new riddles that you will not find anywhere else. If you want brain teasers to improve your IQ while you have fun, you’ve come to the right place.  
  
Chances are that you’ve heard about the ancient river crossing riddles, but do you know them all? You may have heard about the farmer who must take a wolf, a goat, and some cabbage across a river, or a version featuring a fox, a goose, and a bag of beans. Maybe you know the problem of the three missionaries and three cannibals, or the “jealous husbands” variation.  
Those are the classic river crossing puzzles. They are popular and well known, and they are all included in this game, along with many newer levels involving chess pieces, a farmer with cows and special levels designed only for geniuses.

**Prerequisites**

you need to install an JVM and JDK to let java application work to your software, we prefer windows operation system.

**Installing**

Just run the game and enjoy it.

**Levels:**

Each level in this game have its own strategy which depend on unique logic., this game consists of 4 levels

1)A farmer wants to cross a river and take with him a wolf, a goat, and a cabbage. (this level has two rules).

2) Four farmers and their animal need to cross a river in a small boat. The weights of the farmers are 90 kg, 80 kg,60 kg and 40 kg respectively, and the weight of the animal is 20 kg. (this level has two rules).

3)Five people want to get to the other side of a river, but each of them dislikes his immediate neighbors, the first person dislikes the second and the fifth person; the second person dislike the first and the third; the third person dislike the second and the fourth; the fourth person dislikes the third and the fifth and the fifth person dislikes the fourth and the first. (this level has two rules)

4)two workers and two children want to cross a river, the raft can hold maximum of one worker or two children. (this level has two rules)

**Built With**

**1)** Intelliji-frame work

**2)** java FX-scene builder

## **Contributing**

Please read [Link.md](https://gist.github.com/PurpleBooth/b24679402957c63ec426) for details on our code of conduct, and the process for submitting pull requests to us.

## **Versioning**

This is version 1.0 from river crossing, for new versions visit link.md .

## **Design patterns**

○ Singleton

○ Command

○ Strategy

○ MVC

○ Observer

○ Factory

○ Snapshot (Memento)

○ Iterator

**Files**

For saving and loading the game and saving game state.

1) saves.xml

2) GUI folder

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**License**

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