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October 1, 2014

Web Programming Fundamentals

Problem Solving

**A Cat, a Parrot, and a Bag of Seed**

The problem is a man needs to transfer a cat, a parrot, and a bag of seed across the river but he is only able to fit himself and one of the items on the boat.

The sub-goal is to get all across safely.

The constraints are that he cannot leave the cat and the bird alone together, nor can he leave the bird and the bag of seed alone together.

The solution is to bring the bird over first because the cat will not eat the bag of seed. He leaves the bird on the bank and goes back for the cat. Then he leaves the cat but brings the bird back with him because if he leaves the bird there, the cat will eat the bird. Then he picks up the bag of seed and leaves the bird behind since he can only have one item on the boat with him. He brings the bag of seed over and leaves it next to the cat, then goes back for the bird. Now when he gets back across, all three items are safely on the other side without losing one.