## Justin Henry Web Programming Fundamentals

Activity: Problem Solving 10/1/13

A Cat, a Parrot, and a Bag of Seed

A man must transport items A, B, and C individually where neither A and B, nor B and C may left alone with each other. In other words, the goal is to get all three items from Point 1 to Point 2 while only having the ability to transport one item at a time.

Items A, B, and C are a cat, a parrot, and a bag of seed, respectively. An AB pairing would result in the parrot being eaten by the cat. A BC pairing would result in the seeds being eaten by the parrot. It is not stated in the problem but I can infer that the cat and bag of seeds pose no threat to each other because cats don’t eat seeds and seeds don’t eat cats. So, the man should not be constrained by leaving items A and C alone with each other.

The first item to be transported must not result in an AB or BC pairing, but an AC pairing is okay. Therefore, the first item to be transported should be item B.

Point 1: **ABC** Point 2:

Point 1: **AC**  **B** Point 2:

Point 1: **AC**  Point 2: **B**

Point 1: **A** **C** Point 2: **B**

Point 1: **A**  **B** Point 2: **C**

Point 1: **B** **A** Point 2: **C**

Point 1: **B**  Point 2: **AC**

Point 1: **B** Point 2: **AC**

Point 1: Point 2: **ABC**