A cat, a parrot, and a bag of seed

1. Define the problem.
   1. A man needs to get a bird, a cat, and a bag of seed to the other side in his boat that has room enough for himself and 1 other item at a time.
   2. The problem presented is pretty straight forward but the conditions it proposes makes the problem seem to be more trivial than it really is. Additionally, the parameters ambiguity seems to play a large part in the illusion of a complex scenario. I had to keep things simple and in perspective in order not to get lost in attempting to find out unnecessary details. Clearing my mind and thinking of the problem in the context of a video game using simple logic (i.e. Light Bot) will definitely help simplify the problem and quickly find a solution.
   3. The overall goal is to get the man, cat, parrot, and bag of seed to the other side of the river via his boat. without leaving 2 alone where one can consume the other (i.e. cat & parrot, parrot & seed).
2. Break the problem apart
   1. Constraints:
      1. The boat has room for the man and one other item at a time.
      2. If alone, the cat can eat the parrot.
      3. If alone, the parrot can eat the seed.
   2. Sub-goals:
      1. Transport all passengers across to the other sides.
      2. Do not leave the cat alone with parrot.
      3. Do not leave the parrot alone with the see
3. Identify potential solutions
   1. Take the passengers 1 by 1 to the other side
   2. Hold the cat, have the bird on your shoulder, and the bag of seed in your pocket and take them across.
   3. Take the cat and the bag of seed over first and let the bird fly over.
4. Evaluate each potential solution
   1. ★★★★★Solution a: most logical and rational of all the solution possibilities and passed all the user case tests.
   2. ★★★★★This is the ideal solution except the user case testing didn’t all support this solution.
   3. ★★★★★ This solution presents many assumed situations not supported by the word problem but can happen and could be a possible solution. Not as logical, or rational as the other two and didn’t pass all user case tests.