Supplement: Instructions

I. RED-HAT-PUZZLES

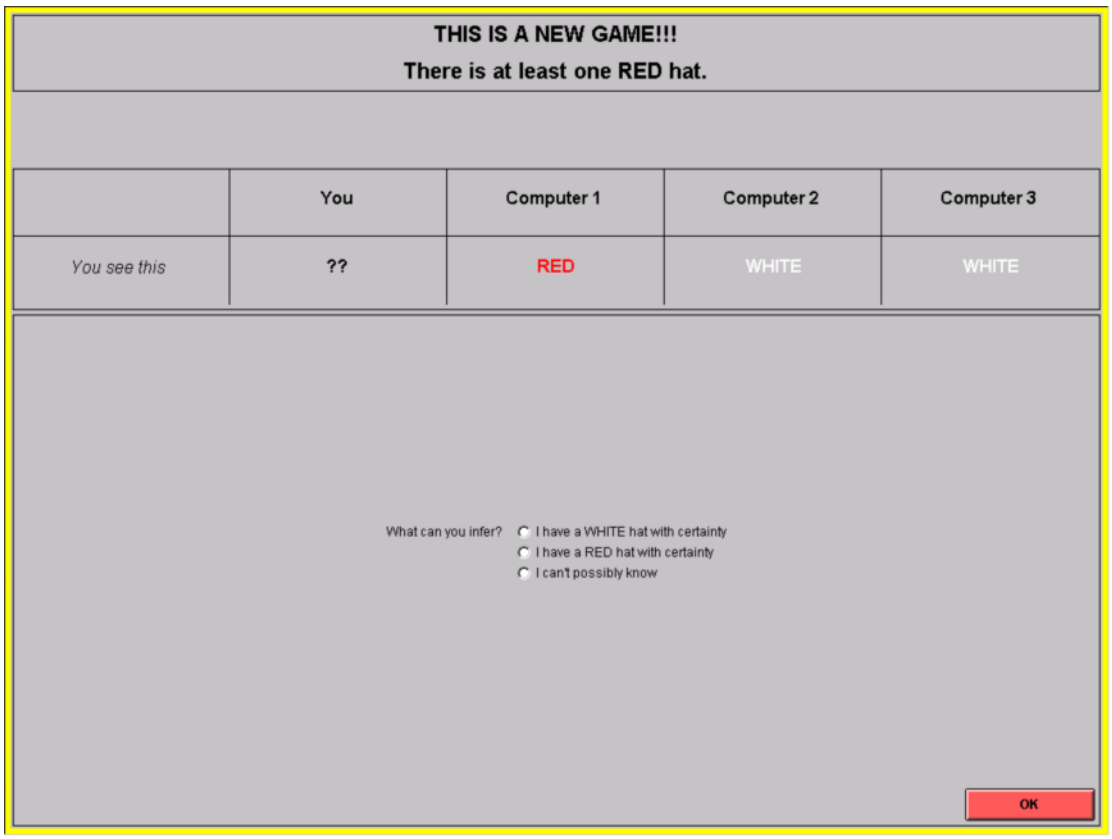
Instructions

Thank you for your participation in this experiment. If you read these instructions carefully and act upon them, you can earn real money.

You are not allowed to communicate with other participants during the course of the experiment. If you do not follow this rule you may be excluded from the experiment.

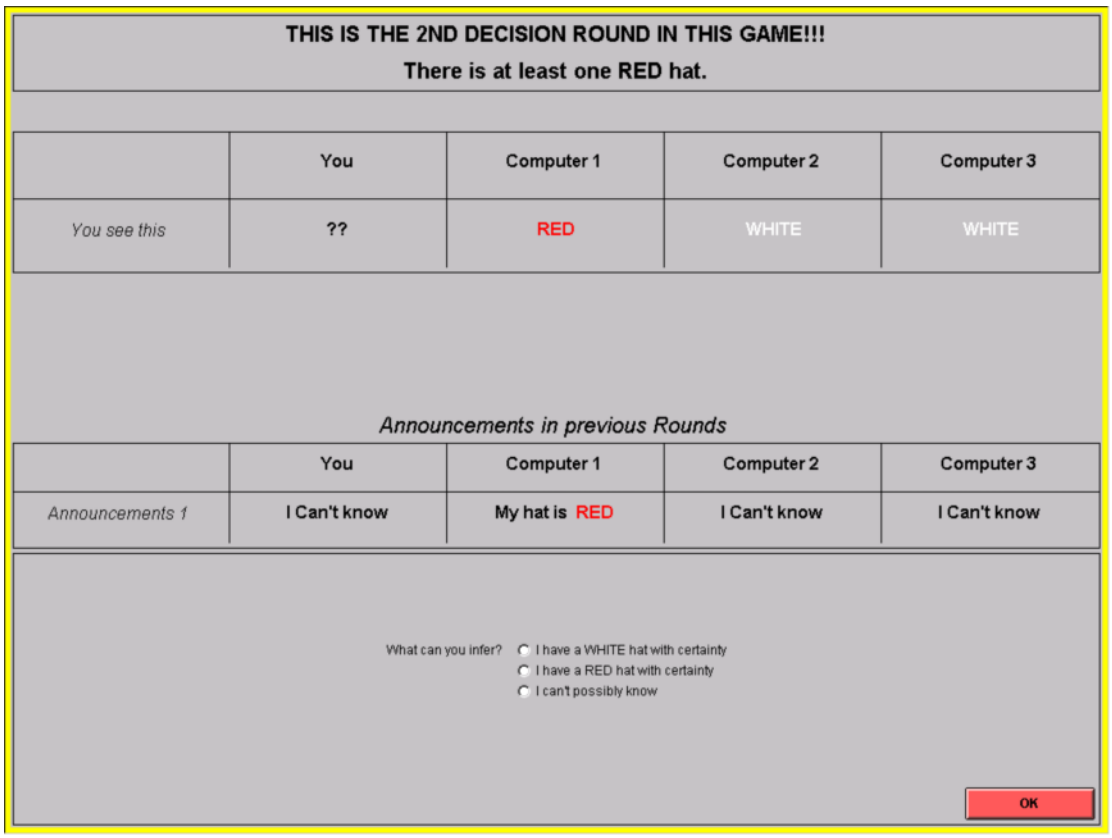
Your task

Your task in this experiment is to determine the colour (red or white) of your hat. You will be paired with 3 computer-players. You will be able to see the colour of the hats of the computer-players, but **not** the colour of your own hat. The computer-players are in a similar situation. They observe your hat colour and the hat colours of their fellow computer-players, but not the colour of their own hat. However, everybody knows (you and the computer-players) that *at least one player has a red hat*. The picture below shows a typical situation:



You observe in this case that one of the computer-players has a red hat while the other two have white hats. The question marks "??" indicate that you do not know your hat colour.
You are asked to decide what you can infer from the information you are given. Possible answers are: "I have a WHITE hat with certainty", "I have a RED hat with certainty", and "I can't possibly know". One of these answers is correct, the two others are wrong. Note that answering "I can't possibly know" is wrong whenever it is possible to correctly infer the hat colour from the information given. Similarly ticking "I have a WHITE hat with certainty" or "I have a RED hat with certainty" is only correct if it is actually possible to logically infer that your hat colour is white or red.

The game may end after your initial decision. If the game continues, you will be given the additional information of what the computer-players have inferred from their observation. Recall that the computer-players face the same problem as you do. They can see the hats of all the others but not their own. Therefore, in the above situation, Computer 1 knows that the hats of computers' 2 and 3 are white, and also knows your hat colour. However, it does not know its own hat colour. Consequently, the computers also have a logically correct answer to the question: what can you (Computer) infer about your hat colour? The computers ALWAYS choose the logically CORRECT answer.



Above you can see a possible screen for your second decision. You again have to decide what you can infer about your hat's colour. However, now you have the additional information about what the computers (correctly) announced in the decision round before. After you have made another decision, the game may end or continue. If the game continues, you will again be given the additional information of what the

computers inferred from the previous round. This process will go on until you either correctly inferred your hat colour or until you made a mistake.

Different games

After a game has ended, another new game will start. You will be given a set of 7 games.

Payment

You will start with 20 Australian Dollars. For each mistake you make, we will deduct 2.50 Dollars from your account. After the 7 games you will be paid the amount remaining in cash.

Introductory questions

Before you start the actual game we will ask you some questions about the game. These questions will be designed to test if you understand the instructions. Please make sure to read the instruction very carefully, as failing to answer the pre-game questions correctly may lead to exclusion from the experiment.

Questions

Do you have any questions? If yes please raise your hand and we will come and answer them in private.

II. STRATEGIC-FORM GAMES

Instructions

Welcome to our experiment. Please read these instructions carefully. Understanding the instructions is crucial for earning money.

This is an experiment in decision-making. You will be paid for your participation. The exact amount of money you will receive will be determined during the experiment and will depend on your choices. This amount will be added to your total earnings from all task of today's session. In this experiment you will play in 14 situations.

If you have any questions during the experiment, raise your hand and the experimenter will assist you. It is strictly forbidden to talk, exclaim, or to communicate with other participants during the experiment. It is very important for us that you obey these rules. Otherwise the data generated in this session are useless.

The task

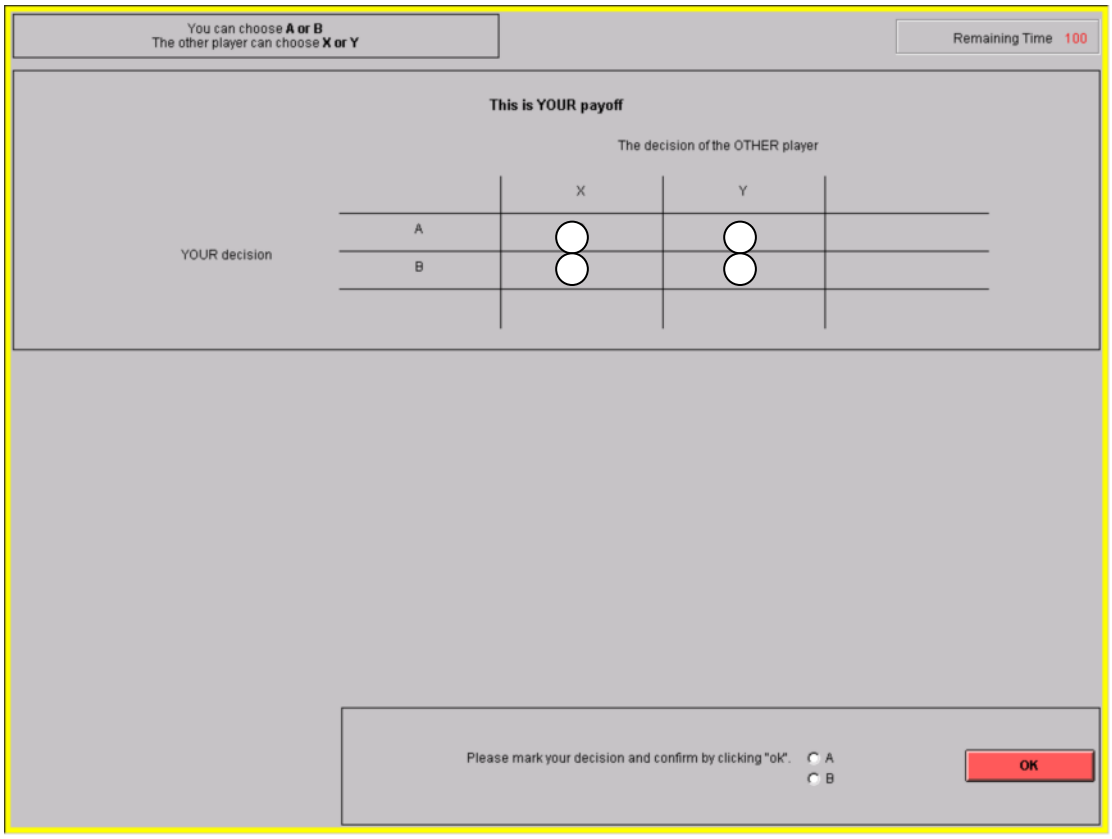
You will be asked to choose an action each in nine different situations. In each situation you are randomly paired with another participant. The participant will also have to choose an action. You and the participant you are paired with have to choose the action at the same time, such that both you and your partner cannot condition the choice on the choice of each other. The payoff you receive in a situation depends on your action and on the action of the other participant, as the other participants payoff will depend on his/her and your choice. All payoffs are in Dollars. Recall that we will randomly determine one of the nine situations where you will pay your payoff in Dollars.

The actions you can choose from vary from game to game. The actions the other participant can choose from also vary from game to game. You (and the participant you are paired with in a particular round) may have one (A), two (A or B) or three actions (A, B, or C). The possible choices will be communicated to you in the top left corner of your decision screen. The participant you are paired with in a particular round may also have one, two or three choices (X, Y, Z).

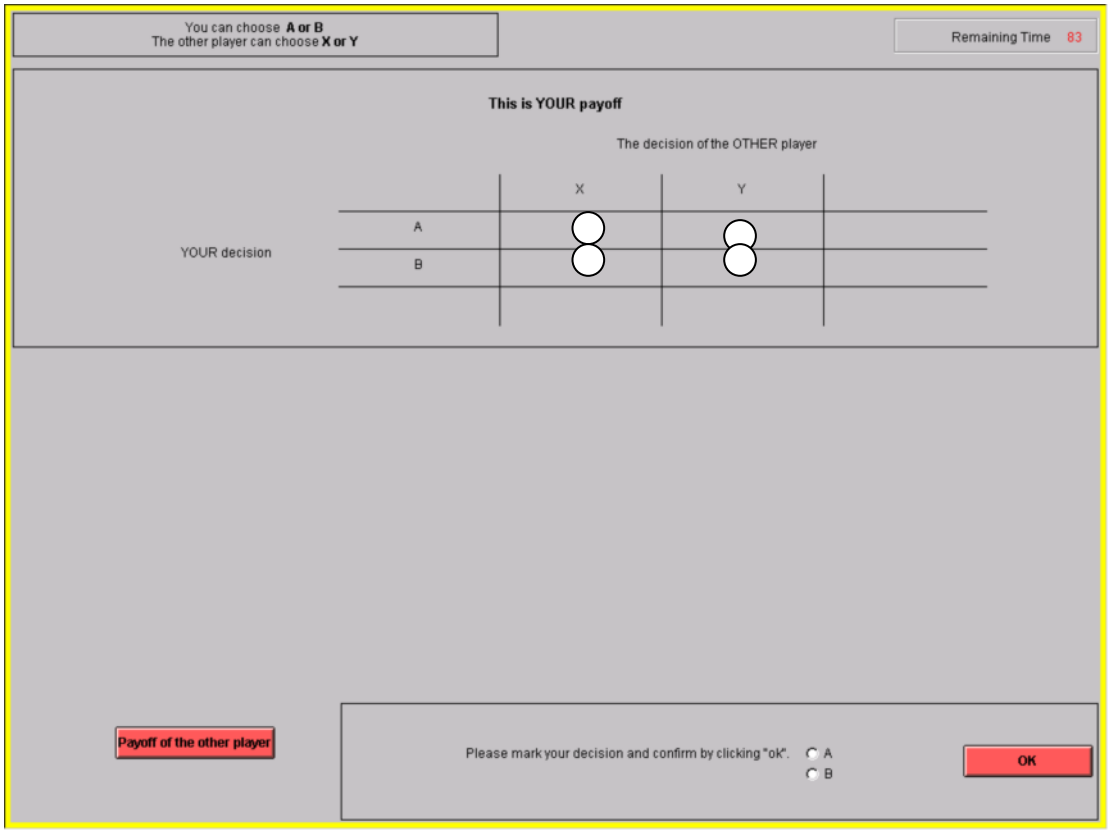
Your payoffs - depending on your choice and the choice of the participant you are paired with - will be shown on the same screen below the information on the available choices.
Further below you can mark your decision and finalize it by clicking the “OK” button.

About 20 seconds after this information is presented to you a button appears. Pressing this button allows you to see the payoff of the participant you are paired with depending on your and his/her choice. The information on your payoffs will remain on the screen no matter if you choose to view the payoff of the other person or not. It is entirely up to you if you want to view the information on the other person’s payoff or not. Note that you can mark and finalize your choice already before this button even appears.

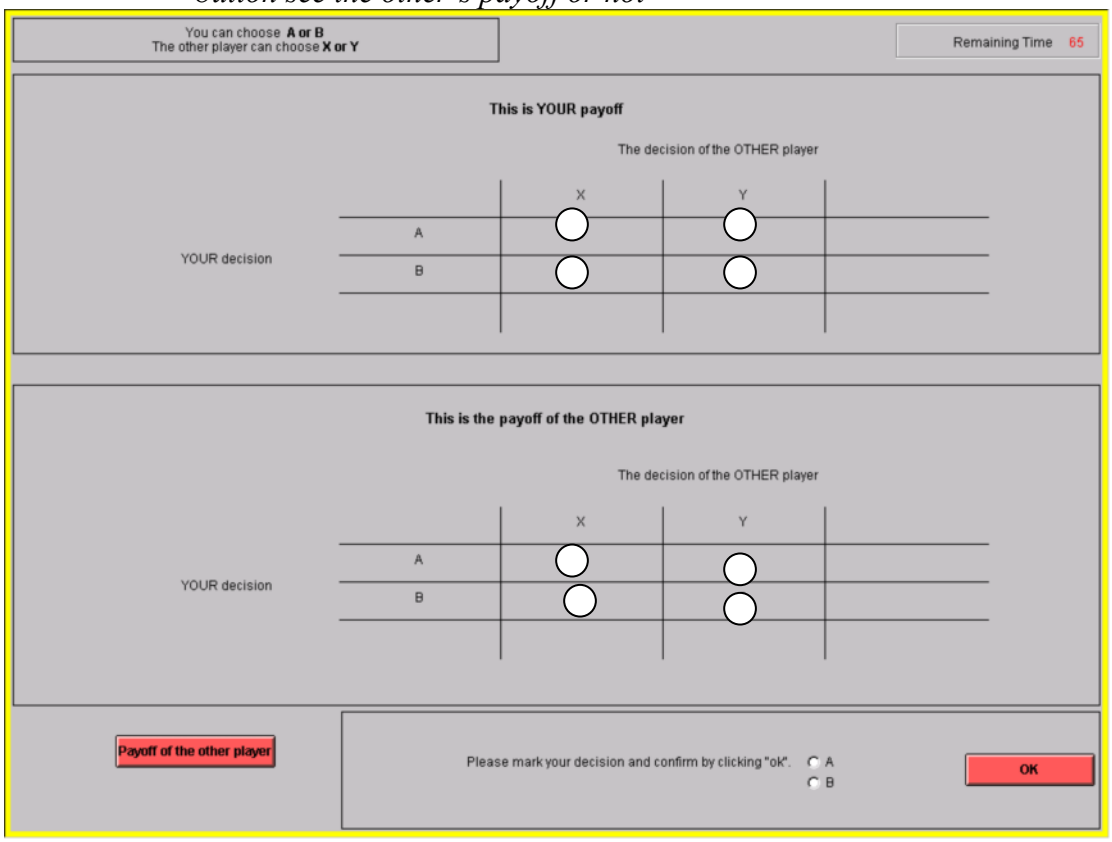
We end these instructions by presenting some screenshots (in chronological order of their possible appearance). In the actual game, the white circles will be replaced by numbers, which represent payoffs in Dollars.



Screenshot1: *This is what a screen initially looks like (you can already decide if you want)*



Sceenshot 2: *After twenty seconds the button has appeared. You can click on the button see the other's payoff or not*



Sceenshot 3: *This shows what you see if you click on the button*