Appendix I
Sample instructions: star-out network

Introduction

This is an experiment in the economics of decision-making. A research foundation has provided funds for conducting this research. Your earnings will depend partly on your decisions and partly on the decisions of the other participants in the experiments. If you follow the instructions and make careful decisions, you may earn a considerable amount of money. Please do not talk with anyone during the experiment. We ask everyone to remain silent until the end of the last round.

At this point, take a minute to write down the number of the computer you are using as it appears on the top of the monitor. At the end of the experiment, you should use your computer number to claim your earnings. At this time, you will receive $10 as a participation fee (simply for showing up on time). Details of how you will make decisions will be provided below.

During the experiment we will speak in terms of experimental tokens instead of dollars. Your payoffs will be calculated in terms of tokens and then translated at the end of the experiment into dollars at the following rate:

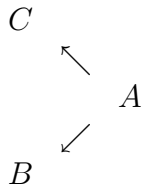
2 Tokens = 1 Dollar

In this experiment, you will participate in 25 independent and identical (of the same form) rounds, each divided into three decision-turns. In each round, you will be assigned to a position in a three-person network. You will only be able to observe the choices of the other participants to whom you are connected in this network.

Before the first round, you will be randomly assigned to one of the network positions labeled A, B, or C. One third of the participants in the room will be designated as type-A participants, one third as type-B participants and one third as type-C participants. Your type (A, B, or C) depends solely upon chance and will remain constant in all rounds throughout the experiment.

When you are asked to make your first decision, your type will be displayed on the left hand side of the dialog window (see attachment I). The network is displayed in the window that appears on the right hand side of the dialog window. It is also illustrated in the scheme below. A line segment

between any two types indicates that they are connected. An arrowhead points to a participant whose action can be observed by the participant at the other end of the line segment.



Note that in the network used in this experiment, the type-A participants can observe the choices of type-B and type-C whereas type-B and type-C participants cannot observe the choices of any other type.

A decision round

Next, we will describe in detail the process that will be repeated in all 25 rounds. Each round starts by having the computer randomly form three-person groups by selecting one participant of type-A, one of type-B and one of type-C.

The groups formed in each round depend solely upon chance and are independent of the groups formed in any of the other rounds. Each participant of type-A is equally likely to be included in any group, and similarly for participants of type-B and type-C. Groups are formed by the computer.

At the beginning of every round each participant receives an endowment of one token. In each round you will be asked to invest your token in one of two accounts labeled x and y. The accounts of the type-A participants are labeled and , respectively, and similarly for participants of type-B or type-C.

When you are asked to make your first decision, you will be asked to input the letter of the account, x or y, in which you wish to invest your token. When you are ready to make your decision, all you need to do is use the mouse to click on either the x-button or the y-button, which are found in the lower left hand corner of the dialog window. After you have made your decision, you must confirm it by clicking on the Submit button (see Attachment I).

When everyone in your group has made a decision, the type-A participant in your group will observe the choice of the type-B and type-C participants. Thus, if you are a type-A participant, you will be informed which account, x_B or y_B, the type-B participant has chosen and which account, x_C or y_C,

the type-C participant has chosen. This information is displayed in the large window that appears at the top of the dialog window (see Attachment II). The type-B and type-C participants will not be able observe the accounts chosen by the other participants in the group. This completes the first of three decision-turns in this round.

Investing the token in account y is irreversible. Therefore, if you invested your token in account y in the first decision-turn you will not have any decision to make at the second turn in the round. If you invested in account x in the first turn you will be asked to make a second decision, without receiving another token. You will again be asked to click on the letter of the account, x or y, in which you want to invest your token. When everyone in your group has made a decision, the type-A participant in your group will observe the choice made in the second decision-turn by the type-B and type-C participants. The type-B and type-C participants will again not be able observe the accounts chosen by the other participants in the group.

This process will be repeated in the third decision-turn. Note, again, that investment in account y is irreversible: once you have invested your token in account y it will be kept there until the last decision turn. When the first round ends, the computer will inform everyone how many participants in their group had their token invested in account y at the last turn of the round.

After letting you observe the results of the first round, the second round will start by having the computer randomly form new groups of participants in networks. The process will be repeated until all the 25 independent and identical rounds are completed. The results of previous rounds are given to you in the large window that appears at the bottom of the dialog window (see Attachment II). At the end of the last round, you will be informed the experiment has ended.

Earnings

Your earnings in each round are determined by the allocation of tokens within your group at the last turn; more precisely, your earnings depend on the number of tokens in your x account and the total number of tokens in the y accounts.

- If the total number of tokens in the y accounts within your group is at least 2, each participant in the group will receive 2 tokens plus the number of tokens in his or her personal x account.

- If the total number of tokens in the y accounts within your group is less than 2, each participant in the group will receive the number of tokens in his or her personal x account only.

For example, if the type-A participant and the type-B participant invest in the x account and the type-C invests in the y account, we have

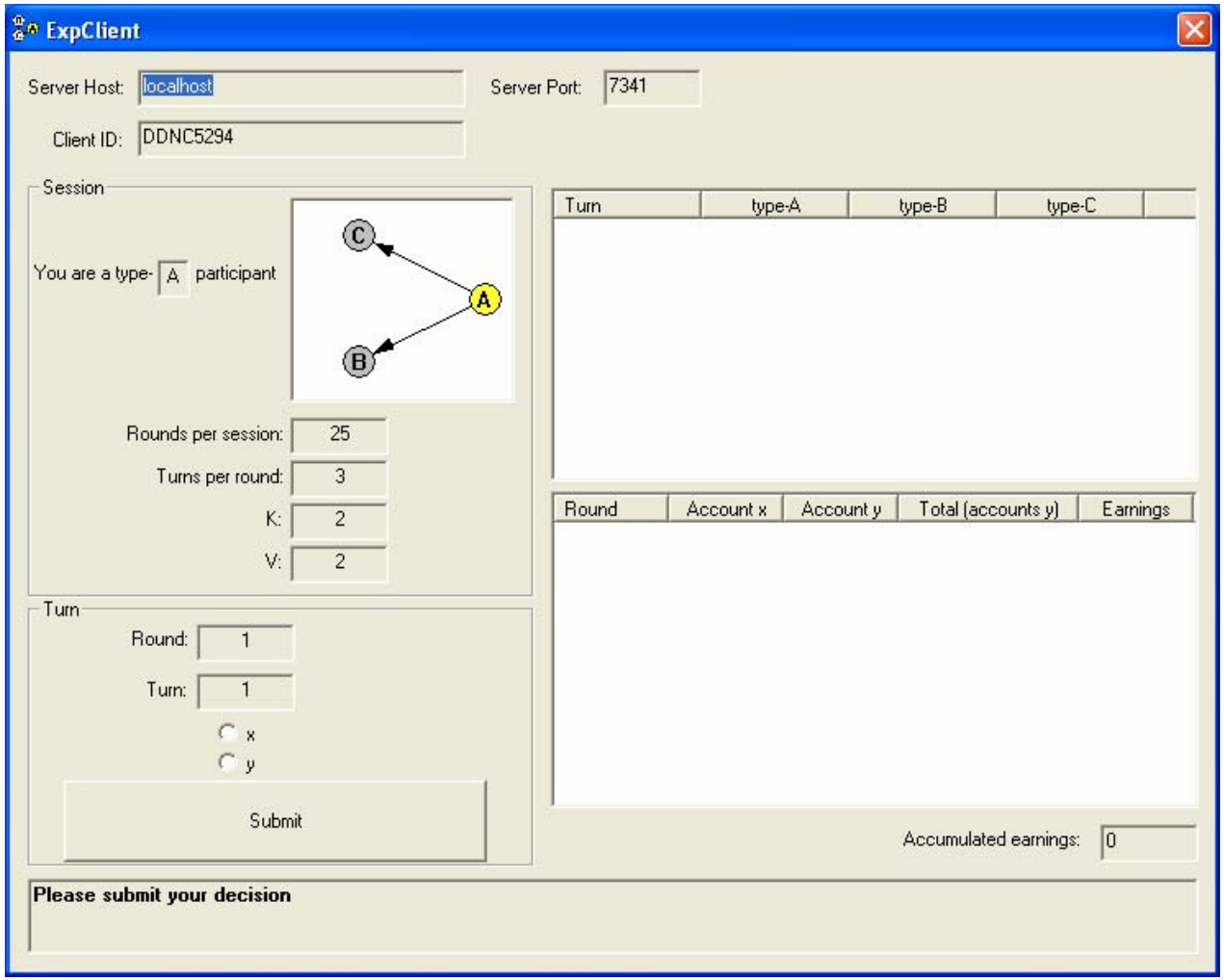
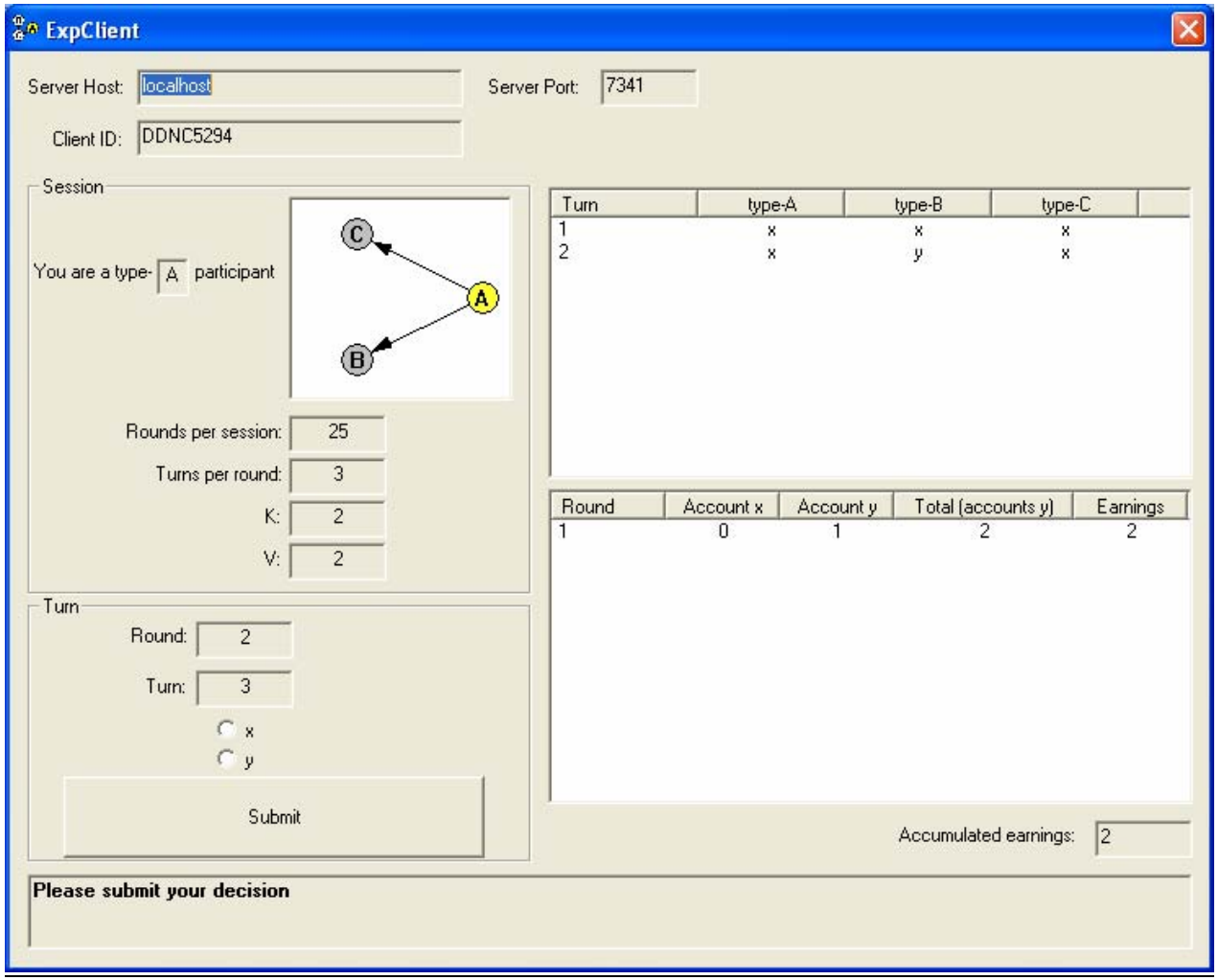
$$x_A = x_B = 1 \text{ and } x_C = 0 \text{ and } y_A = y_B = 0 \text{ and } y_C = 1.$$

So the total investment in y accounts is 1 token and type-A and type-B receive 1 token each and type-C receives no tokens.

Your final earnings in the experiment will be the sum of your earnings over the 25 rounds. At the end of the experiment, the tokens will be converted into money. Each token you have accumulated is worth 0.50 dollars. You will receive your payment as you leave the experiment. Your participation in the experiment and any information about your earnings will be kept strictly confidential.

If there are no further questions, you are ready to start. An instructor will approach your desk and activate your program.

Attachment I



Attachment II