Introduction

Do not read ahead in the booklet.

Answer all of the questions on each page before you move onto the next page.

Do not go back to a previous page for any reason.

Do not communicate with anyone else during the experiment, or look at other people's answers.

Answer all questions.

You have 40 minutes to complete the experiment.

Question 1

You are a software product manager. One of your main responsibilities is deciding which requirements will make the next release of the product. Your performance is measured by the revenue generated by the product. Remember you have a limited development budget.

In each of the following sets of requirements you must choose one to implement for the next release. Assume the cost of implementation of each requirement in a set is the same.

Set A

Mark one (X)	
	Requirement A will raise €10,000 revenue.
	Requirement B could raise €2,400 revenue with 75% probability, or €32,800 revenue with 25% probability.

Set B

Mark one (X)	
	Requirement C will raise €10,000 revenue.
	Requirement D will raise €2,000 or €18,000 revenue will equal probability.

Set C

Mark one (X)	
	Requirement E will raise €10,000 revenue.
	Requirement F could raise €200 revenue with 30% probability, or €14,200 revenue with 70% probability.

Question 2

Question 2A

In priority order, name the three biggest causes of faults in software products?

1 (highest)	
2	
3	

Question 2B

In priority order, name the three most important aspect affecting the quality of student life at BTH?

Rank (1,2,3)	
	Access to study literature
	Opportunity to receive supervision/guidance from the teacher
	Accommodation/housing issues
	Diversity of activities and entertainment outside studies
	Other – specify:
	Other – specify:
	Other – specify:

Characterisation

Undergraduate major Eg. Computer Engineering, Computer Science, Software Engineering		
Years of higher education Including undergraduate and higher studies		
Years of work experience In technical or technical-related disciplines		
Last 3 jobs Eg. Developer, tester, business analyst, technical designer, project manager	**Role**	**Years**
Last		
Second last		
Third last		
Gender		
Age		
Nationality		

Question 3

Look at the following sentences, for each indicate if it was presented at the beginning of the experiment, and provide a confidence rating from 1 (very low) to 5 (very high).

	Presented (Yes/No)	**Confidence** 1 Low – 5 High
The ants ate the jelly that was on the table.		
The ants in the kitchen ate the sweet jelly that was on the table.		
The ants ate the sweet jelly.		

Question 4

You are a software product manager. One of your main responsibilities is deciding which requirements will make the next release of the product. Your performance is measured by the revenue generated by the product. Remember you have a limited development budget.

In each of the following sets of requirements you must choose one to implement for the next release. Assume the revenue generated for each requirement in a set is the same.

Set A

Mark one (X)	
	Requirement A has a cost of €10,000.
	Requirement B could cost €2,400 with 75% probability, or €32,800 with 25% probability.

Set B

Mark one (X)	
	Requirement C has a cost of €10,000.
	Requirement D could cost €2,000 or €18,000 will equal probability

Set C

Mark one (X)	
	Requirement E has a cost of €10,000.
	Requirement F could cost €200 with 30% probability, or €14,200 with 70% probability.

Question 5

Question 5A

Suppose an Unbiased coin is flipped three times, and each time the coin lands on heads. If you had to bed 500 SEK on the next toss, what side would you choose?

Mark one (X)	
	Heads
	Tail
	No preference

Question 5B

Which of the following sequences of X's and O's seems more like it was generated by a random process (eg. Coin flipping)?

Mark one (X)	
	XOXXXOOOOXOXXOOOXXXOX
	XOXOXOOOXXOXOXOOXXXOX

Question 5C

The mean IQ of a population of eighth graders in a city is known to be 100. You have selected a random sample of 50 children for a study of educational achievements. The first child test has an IQ of 150. What do you expect the mean IQ to be for the whole sample?

Answer	

Question 5D

Suppose a study of 250 neurology patients finds the following frequencies of dizziness and brain tumours:

		Brain Tumour	
		Present	Absent
Dizziness	Present	160	40
	Absent	40	10

Which cells of the table are needed in order to determine whether dizziness is associated with brain tumours in this sample of people? (Check all that apply.)

Mark all that apply (X)	
	Upper left
	Lower left
	Upper right
	Lower right

Question 5E

As the president of a software development company, you have invested €10 million of the company's money into a research project. The purpose was to create encryption software product using chaos theory. When the project is 90% complete another company starts marketing a software product that uses chaos theory to encrypt data. It is also apparent that their software is much faster and easy to use than what your company is building. Should you invest the remaining 10% to complete the project?

Mark one (X)	
	No – It makes no sense to continue spending money on the project
	Yes – As long as €10 million is already invested; I might as well finish the project.

When you have completed this question you can hand your paper in to the tester.

Be back in this room at 11:30 for the summary.