
Start of Block: Identification Questions

SurveyName E4_EntrySurvey

Please, use only the survey buttons to navigate the survey (do not use the browser buttons).

Training procedure:

1. First, you will be asked about your background experience in areas of expertise relevant to this experiment.
 2. Next, you will answer a few questions based on Tuesday's lecture and the scenario descriptions received in this entry survey
 3. You will be randomly assigned a group. Please take note of the group assigned to you.
 4. You will watch a short video of the two scenario descriptions A short scenario description of modifying and updating repositories on GitHub. A short description of a pod deployment on Kubernetes
 5. Lastly, you will receive the video of the walkthrough for the actual experiment
-

Page Break

StudentID

Fill in your first name, last name, and student ID.

Example

First Name: XXX

Last Name: XXX

Student ID: 1234567

Email Address: XXX

☐ First Name (6) _____

☐ Last Name (4) _____

☐ Student ID (5) _____

☐ Email (8) _____

End of Block: Identification Questions

Start of Block: Validate email

Q36 You will receive a confirmation email to [\\${StudentID/ChoiceTextEntryValue/8}](#), Is this correct?

☐ Yes (1)

☐ No (then go back and fix it) (2)

End of Block: Validate email

Start of Block: Previous experience

STRIDE 1.1 Do you have any experience with secure design techniques (e.g., STRIDE threat modeling, Data Flow Diagrams, misuse cases, attack trees,...)?

- ☐ I am a novice in secure design topics (I haven't seen this before) (1)
- ☐ I have attended some lectures or a full course on secure design techniques (e.g., course on threat modeling with STRIDE) (2)
- ☐ I have tried tools for securely designing software (e.g., tools for DFD modeling or analyzing threats with STRIDE) in hands-on labs or during short internships (3)
- ☐ I have used tools for securely designing software (e.g., DFD modeling or analyzing threats with STRIDE) during my professional experiences (>3 months) (4)
- ☐ I am a professional in secure design topics (e.g., threat modeler using STRIDE with >2 years work or have an equivalent professional experience) (5)
-

Q3 1.2 How do you rate your familiarity with specific software design models?

	Very Limited (1)	Limited (2)	Adequate (3)	Good (4)	Very Good (5)
Sequence Diagram (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Component Diagrams (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deployment Diagrams (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data Flow Diagrams (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Github 1.3 Do you have any experience working with GitHub (in any context. E.g., university, internship, or Job)?

- ☐ I have attended some lectures on Github in a course or on some web site (4)
 - ☐ I have attended a full course on Github (5)
 - ☐ I have tried tools for developing, deploying or orchestrating software with Github in hands-on labs or during short internships (6)
 - ☐ I have used tools for developing, deploying or orchestrating software with Github during my professional experiences (>3 months) (7)
 - ☐ I am a professional GitHub devops engineer (>2 years work) or have an equivalent professional experience (8)
-

Kubernetes 1.4 Do you have any experience working with cloud deployment platforms like Kubernetes, AWS (in any context. E.g., university, internship, or Job)?

- ☐ I have attended some lectures on Kubernetes in a course or on some web site (4)
- ☐ I have attended a full course on Kubernetes (5)
- ☐ I have tried tools for developing, deploying or orchestrating software with Kubernetes in hands-on labs or during short internships (6)
- ☐ I have used tools for developing, deploying or orchestrating software with Kubernetes during my professional experiences (>3 months) (7)
- ☐ I am a professional Kubernetes devops engineer (>2 years work) or have an equivalent professional experience (8)

End of Block: Previous experience

Start of Block: Randomization

DFD/GPT

You are randomly assigned to

Group A.

Please take note of the group.

DFD/noGPT

You are randomly assigned to

Group B.

Please take a note of the group.

noDFD/GPT

You are randomly assigned to

Group C.

Please take a note of the group.

noDFD/noGPT

You are randomly assigned to

Group D.

Please take a note of the group.

Page Break

End of Block: Randomization

Start of Block: GPT experience

Q57 1.6 What do you use GPT for?

- ☐ Writing emails (1)
 - ☐ Writing code (2)
 - ☐ Debugging code (3)
 - ☐ Improving text for reports (4)
 - ☐ Other (please specify) (5)
-

ChatGPT 1.5 How often do you use GPT?

- ☐ Several times a day (1)
 - ☐ Once a week (2)
 - ☐ A few times a month (3)
 - ☐ Once in 3 months (4)
 - ☐ Never (5)
 - ☐ Other (please specify) (6)
-

End of Block: GPT experience

Start of Block: Questions on STRIDE

Q69 In the following sections, you will be required to answer several questions based on the lecture received on Tuesday and the scenario description received in this entry survey.

Q70 STRIDE is an acronym for the levels of privacy threats in a software system

- ☐ True (1)
- ☐ False (2)
-

Q71 Repudiation is being able to claim you didn't do something (even if you did it)

- ☐ True (1)
- ☐ False (2)
-

Q72 If we assume that a sensor (e.g., a heartbeat monitor) cannot be spoofed, there are no other possible security threats related to the sensor data

- ☐ True (1)
- ☐ False (2)
-

Q77 Information disclosure threats are possible if there is a lack of load balancing mechanism

- ☐ True (1)
- ☐ False (2)

End of Block: Questions on STRIDE

Start of Block: Questions on DFD

Q73 The DFD is created after all security threats have been identified

- ☐ True (1)
- ☐ False (2)
-

Q74 DFD elements include processes, data flows, data stores, external entities, and trust boundaries

- ☐ True (1)
- ☐ False (2)
-

Q75 The DFD should never include any security-related information

- ☐ True (1)
- ☐ False (2)
-

Q76 Dataflows are not allowed between external entities and data stores, there should be a process between

- ☐ True (1)
- ☐ False (2)
-

End of Block: Questions on DFD

Start of Block: STRIDE-per-element

Q78 For all the element types, one must investigate all the threat categories

- ☐ True (1)
- ☐ False (2)
-

Q79 Reduction means discarding some assumptions

- ☐ True (1)
- ☐ False (2)
-

Q80 STRIDE-per-element is performed using a UML deployment model

- ☐ True (1)
- ☐ False (2)
-

Q81 STRIDE-per-element suggests visiting each element in the DFD (one at a time) and looking at the "mapping table" to find potential security threats

- ☐ True (1)
- ☐ False (2)

End of Block: STRIDE-per-element

Start of Block: Next Section

Q61 In the next section, you will receive two scenarios (GitHub and Kubernetes). After watching the videos and reading the materials, you will answer a few questions.

End of Block: Next Section

Start of Block: Scenarios DFD

T1 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

DFD 1.1 Follow the links to the scenario:

[GitHub scenario](#)(Please open in a new tab)

[Kubernetes scenario](#) (Please open in a new tab)

IMPORTANT: Please do not share this video with other students that belong to another group! Keep the tabs with the video and reading materials if you want to refer back. This is a forward-only survey

1.2 Here is a word document and training slides of the scenarios you just watched:

GitHub - [Scenario Description](#) and the [Scenario training slides](#)

Kubernetes - [Scenario Description](#) and the [Scenario training slides](#)

Page Break

End of Block: Scenarios DFD

Start of Block: Scenarios noDFD

T1 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

noDFD 1.1 Follow the links to the scenario:

[GitHub scenario](#) (Please open in a new tab)

[Kubernetes scenario](#) (Please open in a new tab)

IMPORTANT: Please do not share this video with other students that belong to another group!
Keep the tabs with the video and reading materials if you want to refer back. This is a forward-only survey

1.2 Here is a word document and training slides of the scenarios you just watched:

GitHub - [Scenario Description](#) and the [Scenario training slides](#)

Kubernetes - [Scenario Description](#) and the [Scenario training slides](#)

End of Block: Scenarios noDFD

Start of Block: Questions on GitHub

Q62 1.1 Does Git automatically record changes made to files in your local repository?

☐ Yes (1)

☐ No (2)

Q63 1.2 What is a staging area?

- ☐ A temporary area where files are held until a commit is made (1)
 - ☐ An area where files are permanently stored after being added with the git add command (2)
 - ☐ An area where files are immediately committed to the repository without further action (3)
-

Q64 1.3 Which of these statements are true

- ☐ Workflows in GitHub Actions are typically defined using JSON syntax (1)
- ☐ Workflows in GitHub Actions are typically stored in the workflows.yml (2)
- ☐ GitHub Actions automates the building, testing, and deployment of software projects (3)

End of Block: Questions on GitHub

Start of Block: Questions on K8

Q65 1.1 What is the primary purpose of replicating the master node?

- ☐ To increase storage capacity for container images (1)
 - ☐ To enhance security measures within the cluster (2)
 - ☐ To maintain availability in the event of a master node crash (3)
-

Q66 1.2 What is the main reason for using a remote and local repository?

- ☐ Enhance performance (2)
 - ☐ Enhance privacy (3)
 - ☐ Make the image-building process much safer (4)
-

Q67 1.3 Does Kubernetes rely on an additional component, the Container Network Interface (CNI) plugin, to manage networking within the cluster?

☐ Yes (1)

☐ No (2)

End of Block: Questions on K8

Start of Block: Walkthrough with GPT

with chatGPT Here's the link to the [walkthrough](#) of the actual experiment

End of Block: Walkthrough with GPT

Start of Block: walkthrough without GPT

without chatGPT Here's the link to the [walkthrough](#) of the actual experiment

End of Block: walkthrough without GPT
