

# Ultimate Security Survey

## Design Specifications

<http://myy.haaga-helia.fi/~a1203246/sprinto/>

<https://github.com/Ytseboy/Ultimate-Security-Survey>

### 1. Application Structure

Our application will provide different kind of functionality for student and teacher users.

#### Sitemap:

//INSERT SITE MAP HERE

#### Pages:

##### Homepage:

Containing log in form. The page is similar for both groups, but after login the application will redirect student or teacher based on their account types to role dependent home page.

##### Initial page:

Page that has a list of the functions possible for the user. Layout is mainly the same for both groups but there are just different functions available.

It also has the user information like name, ID and recent activity.

The landing page should be a dashboard that can be possibly modified and arranged by the users. There should also be links to the other pages, like company, question and survey pages.

It contains basic info about the company.

It should contain a summary of the recent activity by the user as well as the latest questions and categories added to the database. It should also contain two tables with information about customers and surveys respectively.

#### Student pages:

### List of Customer Surveys:

On this page the student see lists of the surveys that he is observing.

Surveys should have status options.

The surveys should be displayed in a table with all the pertinent information. The student should also be able to visualize details of any given survey of his/her choice in a different view with all the pertinent information:

- startDate
- customerSurveyTitle
- startComment
- supervisorUserId
- endDate
- endComment
- Status (verified/unverified)

At the bottom of the page the student should also be able to see pertinent information related to the latest changes made to a specific survey. (*Note: maybe comments should be added here instead.*). Tabbed views should be used here in order to keep the information more compact and clearly separated with small chunks of info.

### Customer Answers: (Shouldn't be on the initial page menu, user is forwarded here from list of surveys)

From list of surveys student can choose a survey, and then all the questions related are displayed. Student can read the company answers and analyse them by giving points. (*Note: There will be no answer specific page. Everything should be seen in the same page.*) The question should have a specific view containing, once again, all the pertinent information related to the user, as for the layout, it should be consistent with the rest of the page. A partial view should be added to the bottom of the page which should render all the answers related to the view.

The user should be able to expand or not the answers section and visualize all the improvement comments made by the teacher.

For each answer there is short textbox for possible observer comment.

In order to keep the layout consistent with the rest of the page. The above information should be contained within a tabbed box with the information separated into small chunks

to facilitate the visualization. The first tab should contain the answer and a textbox to add possible comments, the second tab should contain the improvement suggestions by the teacher(if no suggestions are available, the app will display a default message), the third tab should contain the comment made by the observer, the last tab should allow the student to rate the answer with radio buttons.

//TODO: Attach image with mockup.

For whatever reason this will not be included in the final project.

**/\* Survey report: (User can get here from questions or list of surveys)**

There should be a link to the questions and their answers for observer to be able to review them.

On top of the page there should be the company name, answer rating average based on student given status. The observer should be able to upload here his report about the customer survey. The page should also have an indicator telling if the upload was successful or not. \*/

**Teacher pages:**

**Generic survey page:**

Here teacher can see list of all the surveys he has created. They should be all displayed in small boxes with some basic information(e.g: survey title, description). The teacher should be able to be redirected to the single survey page from here where the remaining functionality will be available.

**Single survey page:** This page has full information about chosen survey, all the questions, assigned company and assigned student. From this page teacher can go to the question page to modify the questions.

**Question page:** Teacher can create more questions for the chosen survey and remove them.

**List of companies:** To add or remove companies. Has necessary information about the company.

**Customer Page:** Company name, id, so on... Type and business.

**List of students:** To add or remove student accounts.

**Single student page:** Name, id so on...

**Report page:** Teacher can read the survey report submitted by the student. Can validate it.

## **1.2 About Page**

Security Survey is an application to make Security Audits for small and middle size companies. In our audits we follow National Security Auditing Criteria guidelines and questions. Our Security Audits vary between 40 and 60 questions.

### **How it works**

The students implement the Security Surveys in the companies. Each survey is created by one teacher, implemented and pre-analyzed by a student and validated by a supervising teacher. Supervising teacher selects one student for a survey. The student visits the company, asks the questions and records the answers.

After the company has given all the answers for the survey the student analyzes the questions and adds them to the system. When the student has done the analyses for each question the student creates a Survey report for the company. The supervising teacher validates the report before it is sent for the company.

## 2. Database

### 2.1 Data Dictionary

Table descriptions

Table name	Description	Medium / Max amount (rows)
Question	Questions form survey. Each question has category and type.	120 / 200
QuestionCategory	Category of a question.	5 / 10
QuestionType	Type of a question.	2 / 2
AnswerOption	Answer options for some questions.	60 / 100
SurveyQuestion	Questions that have been picked-up for a survey.	40 / 60
GenericSurvey	Title, description, level and the survey's supervisor (general survey data).	3 / 5
Customer	Customer data.	3 / 5
CustomerSurvey	Final survey with all the answers from a customer.	3 / 5
UserAccount	User data (teacher or student).	3 / 5

Table name	Column	Description	Data type and Length	NULL / UNIQUE	Primary/A lternate key	Special value domain?
Question	questionId	(Surrogate key)	INTEGER	NOT NULL	PK	IDENTITY(101,1)
	categoryId	(foreign key1=>)	=>QuestionCate gory (categoryId)	NOT NULL	-	(foreign key)
	questionTypeId	(foreign key2=>)	=>QuestionType (questionTypeId )	NOT NULL	-	(foreign key)
	questionTextMain	What the question is	VARCHAR(MAX )	NOT NULL	-	-
	questionTextXtra	Additional	VARCHAR(100	-	-	-

		question (?)	0)			
	baseLevel2RequirementText	-	VARCHAR(MAX)	NOT NULL	-	-
	additionalInfo	Additional info about the question	VARCHAR(MAX)	-	-	-
	additionalNote	Notes	VARCHAR(MAX)	-	-	-
QuestionCategory	categoryId	(Surrogate key)	INTEGER	NOT NULL	PK	IDENTITY(1,1)
	categoryName	Category of a question (group)	VARCHAR(50)	NOT NULL, Unique	-	-
	description	Question category description	VARCHAR(300)	NOT NULL	-	-
QuestionType	questionTypeId	(Surrogate key)	INTEGER	NOT NULL	PK	1 - 2
	questionTypeName	Type of a question	VARCHAR(50)	NOT NULL, Unique	-	Qualitative / Quantitative
	description	Question type description	VARCHAR(300)	-	-	-
AnswerOption	questionId	(foreign key1=>)	=>Question (questionId)	NOT NULL	PK	(foreign key)
	answerNumber	(Surrogate key)	INTEGER	NOT NULL	PK	IDENTITY(1,1)
	answerText	Answer version	VARCHAR(1000)	NOT NULL	-	-
SurveyQuestion	surveyId	(foreign key1=>)	=>GenericSurvey (surveyId)	NOT NULL	PK	(foreign key)
	questionId	(foreign key2=>)	=>Question (questionId)	NOT NULL	PK	(foreign key)
GenericSurvey	surveyId	(Surrogate key)	INTEGER	NOT NULL	PK	IDENTITY(11,1)
	title	Survey title	VARCHAR(100)	NOT NULL	-	-
	description	Survey description	VARCHAR(MAX)	NOT NULL	-	-

	baseLevel	Classification level	INTEGER	NOT NULL	-	2, 3 or 4
	supervisorUserId	(foreign key1=>)	=>UserAccount (userId)	NOT NULL	-	(foreign key)
Customer	customerId	(Surrogate key)	INTEGER	NOT NULL	PK	IDENTITY(11,1)
	companyName	-	VARCHAR(100)	NOT NULL	-	-
	contactFirstName	-	VARCHAR(100)	NOT NULL	-	-
	contactLastName	-	VARCHAR(100)	NOT NULL	-	-
	email	-	VARCHAR(100)	NOT NULL, UNIQUE	Unique value	Valid email address (abides by ASP.NET Email validator regular expression)
	phone	May contain +, ( ) and -.	VARCHAR(100)		-	-
CustomerSurvey	surveyId	(foreign key2=>)	=>GenericSurvey (surveyId)	NOT NULL	PK	(foreign key)
	customerId	(foreign key1=>)	=>Customer (customerId)	NOT NULL	PK	(foreign key)
	startDate	Survey start date	DATE	NOT NULL	PK	Format: "yyyy-MM-dd"
	startComment	-	VARCHAR(MAX)	NOT NULL	-	-
	customerSurveyTitle	-	VARCHAR(100)	NOT NULL	-	-
	supervisorUserId	(foreign key3=>)	=>UserAccount (userId)	NOT NULL	-	(foreign key)
	observerUserId	(foreign key4=>)	=>UserAccount (userId)	NOT NULL	-	(foreign key)
	endDate	Survey end date	DATE		-	Format: "yyyy-MM-dd"
	endComment	-	VARCHAR(MAX)		-	-
UserAccount	userId	(Surrogate key)	INTEGER	NOT NULL	PK	IDENTITY(11,1)
	firstName	-	VARCHAR(100)	NOT NULL	-	
	lastName	-	VARCHAR(100)	NOT NULL	-	

	email	-	VARCHAR(100)	NOT NULL, UNIQUE	Unique value	Valid email address (abides by ASP.NET Email validator regular expression)
	phone	May contain +, ( ) and -.	VARCHAR(100)	NOT NULL	-	-
	userName	to login	VARCHAR(50)	NOT NULL	Unique	
	password	to login	VARCHAR(30)	NOT NULL		
	isTeacher	Teacher or not?	BIT	NOT NULL	-	0 or 1
ObserverStatus	statusValue		INTEGER	PK		-3 -- +3
	description		VARCHAR(100)	NOT NULL		
AnswerStatus	statusValue		INTEGER	PK		0 -- 3
	description		VARCHAR(100)	NOT NULL		
GenericCounter measure	countermeasureId	(Improvements)	INTEGER	PK		
	questionId		INTEGER	FK Question		
	title		VARCHAR(100)			
	description		VARCHAR(MAX)			
	dateAndTime		DATETIME			
	motherCountermeasure		INTEGER	FK to itself		
CustomerAnswer	surveyId		INTEGER	PK, FK		To_CustomerSurvey
	customerId		INTEGER	PK, Fk		To_CustomerSurvey
	startDate		DATE	PK, Fk		To_CustomerSurvey
	questionId		INTEGER	PK, FK		To_Question
	answerStatus		INTEGER	FK		To_AnswerStatus
	answerOptionQuestionId		INTEGER	FK		To_AnswerOption
	answerOptionNumber		INTEGER	FK		To_AnswerOption



	answerText		VARCHAR(MAX) )	NOT NULL		
	observerStatusValue		INTEGER	FK		To_ObserverStatus
	countermeasureId1		INTEGER	FK		To_GenericCounter measure
	countermeasureId2		INTEGER	FK		To_GenericCounter measure
	countermeasureId3		INTEGER	FK		To_GenericCounter measure
	observerComment		VARCHAR(MAX) )			
	observerCommentDate AndTime		DATETIME			
	supervisorComment		VARCHAR(MAX) )			
	supervisorCommentDate AndTime		DATETIME			