The Product Vision Board

Designed for: Secure Software Development Module

**Project Title:**

The team was engaged by OPhone to develop a secure web application which purpose is to sell mobile phone online. Thus, the theme of the application of this project is the sales of mobile phones.

Designed by:

Team Name: D and X

Team Member Names: Dominic, Xihe

**Vision Statement**

Explain your product vision in one phrase or sentence.

We aim to securely design a website that can withstand all attack vectors and yet be simple enough that the user’s experience is not compromised because of security features.

**Product Description**

Describe your product/service.

Our company is called OPhone and it has a website which sells Android phone that are either brand new or refurbished. Profit is earned as the company takes a percentage of each phone sold by resellers and distributors.

Customers are only allowed to buy phones by registering for an account and logging in. The only payment method is cashless payment (credit/debit) and the price has to be paid in full (no monthly installments). Furthermore, the phones will be shipped from the distributor to the location that the customer provides.

There are 2 kinds of users, users and admin. Admins accounts have extra privileges and are reserved for the staff of OPhone.

Customers can search for mobile phone models and be presented with a list of phones that match their search query. There will also be a promotion page which shows the ongoing promotions on certain phone models and this page can only be updated by users with Admin rights.

The web application will be implemented in a 3-Tier architecture. Going from web server to application server to database server. Asp.net will be used for the application server and SQL will be used for the database server.

**Target group**

Who are the target users of your product? Who are the target customers?

Anyone who intends to buy a mobile phone. Basically, every age group other than young children who do not have the monetary power to purchase mobile phones.

**Needs**

What is the problem you are trying to solve? Which goal do you want to achieve?

The problem we are solving is the need to protect the web application from hackers / malicious intent. Hackers can cause great problems by stealing customer info, changing content of the website which will damage the reputation of the company as well as cause monetary loss.

We are trying to achieve holistic security as that will ensure that all our attack surfaces are adequately protected and there are no weak vulnerabilities that attackers can exploit. Through this way can we reliably solve the problem of ensuring the web application is safe from hackers.

**Product Features & Ownership**

Give a top 3 - 5 of the features you want to offer together with name of student who will be working on the feature.

We will be implementing and securing 5 features for the web application. They consist of authentication, authorization, auditing, a CRUD database, and a promotions page showing the items on promotions.

Authentication consists of the signing up and logging in of users. If a user does not have an account created, they will have to use the sign-up page to create an account. Otherwise, a login page will be shown to them to sign in. To sign in they will need their username and password.

Authorization prevents users from performing actions that do not have rights too. Example of this would be a regular user being allowed to edit the price of the phones. It will check if a user is authorized to perform a certain action.

Auditing is the feature that tracks and logs all user’s actions. This way, users will have to take responsibility for their actions ensuring non-repudiation. This can be done by monitoring significant user action such as logging in. It can also detect hackers trying to crack user accounts.

Next, a CRUD database allows for user data to be stored and secured. This will be reserved only for admin users.

Lastly, a promotion page consists of the items that are on promotions. This page acts as an independent page from the page which sells items without discounts. Likewise, only admins users can update the page and regular users can only view and buy items from the page.