D0018E Report

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1 Project background

In this project a e-commerce website for a office supply company will be developed. The webpage is going to be written in php and linked with a SQL database.
This report will showcase several tools used to design the webpage as well as give insight to how it's built and implemented.

2 Functionality

2.1 User stories

- As a user I want to be able to add products to a virtual shopping cart.
- As a user I want to be able to write a review for the products I have ordered.
- As a user I want to be able to login to the website and have my information saved for my orders.
- As an admin I want to be able to add products to the product lists.
- As an admin I want to be able to remove unnecessary reviews.

2.2 User cases

User case: 1

Actor	System user
Precondition	The shopping cart is empty.
Postcondition	The shopping cart contains the correct quantity of the selected products.
Main path (M)	1. User enters website 2. User navigates using categories to wanted product 3. User clicks product ”buy” button 4. Product item is added to user virtual shoppning cart

User case: 2

Actor	System user
Precondition	A product has been ordered.
Postcondition	A review of ordered product is posted on the website
Main path (M)	1. User navigates to product webpage 2. User writes a comment about said product 3. User clicks ”submit review” 4. Review is then added to database and shown on the product webpage

	Actor	System user
User case: 3	Precondition	A user has created an account on the webpage and has ordered some products
	Postcondition	Webpage displays users previously made orders
	Main path (M)	1. User enters and logs in to the webpage 2. User navigates to account overview 3. Webpage displays along other things all previously made orders

	Actor	System user
User case: 4	Precondition	The user has administratory rights on his account
	Postcondition	A new product has been added to the product list
	Main path (M)	1. Admin navigates to product page 2. Admin navigates to the product 3. Admin enters required information and clicks ’post product’ 4. Product becomes listed on the webpage

	Actor	System user
User case: 5	Precondition	Trolls exists online and write unethically mean comments on reviews
	Postcondition	The troll reign ends once and for all as the review is permanently destroyed
	Main path (M)	1. Admin navigates to product page where unethical comments are being posted 2. Admin finds targeted review 3. Admin clicks ’Remove review’and gets promted with a confirmation dialog 4. The review is banished from the product page and database and all becomes well in the world

2.3 Use cases

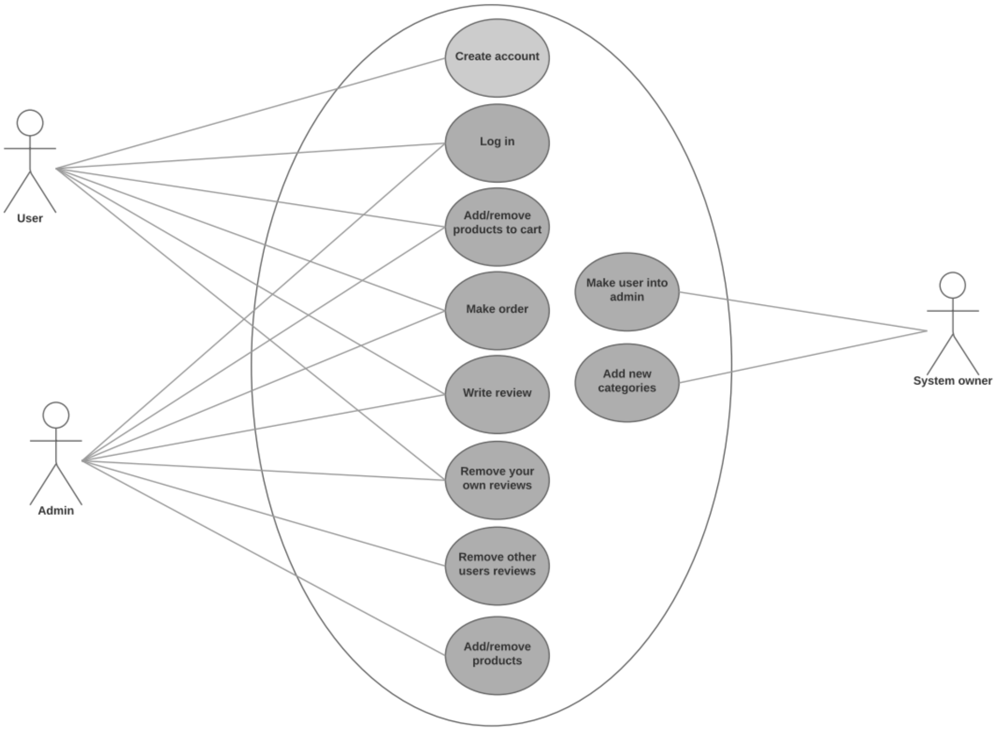


Figure 1: Use cases of the three roles on the webpage

2.4 Requirements

- The user must have a basic grasp at webpage navigation
- The user must remember his own password and account name (no password reset function will exist at first version of webpage)
- The user must have money to purchase our products

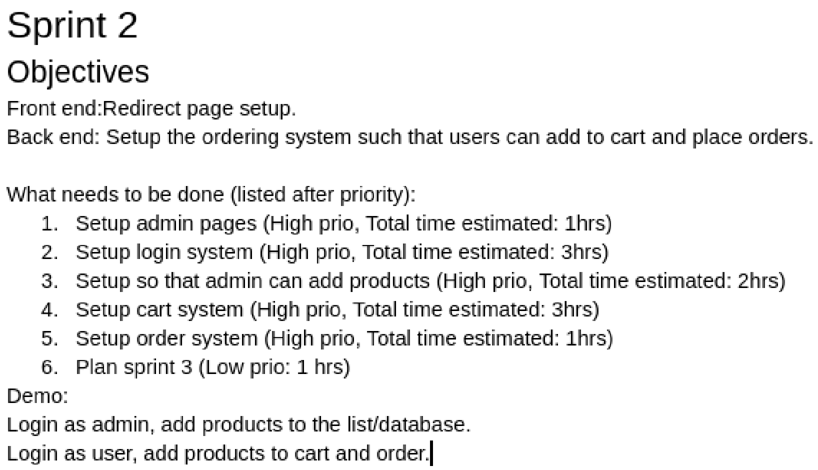
2.5 Assumptions

- We assume that there is a existing money transfer service (Paypal, Swish, Klarna)
- We assume that there will be a existing delivery service (Postnord, DHL, Schenker)

3 Method and tools

MySQL Workbench was used for creating the database schema and setting up the database. For developing the front- and back end web-site ordinary text editors (Kylie, N++, Vim) was used to code in HTML and PHP.

4 Backlog



Sprint 2

Objectives

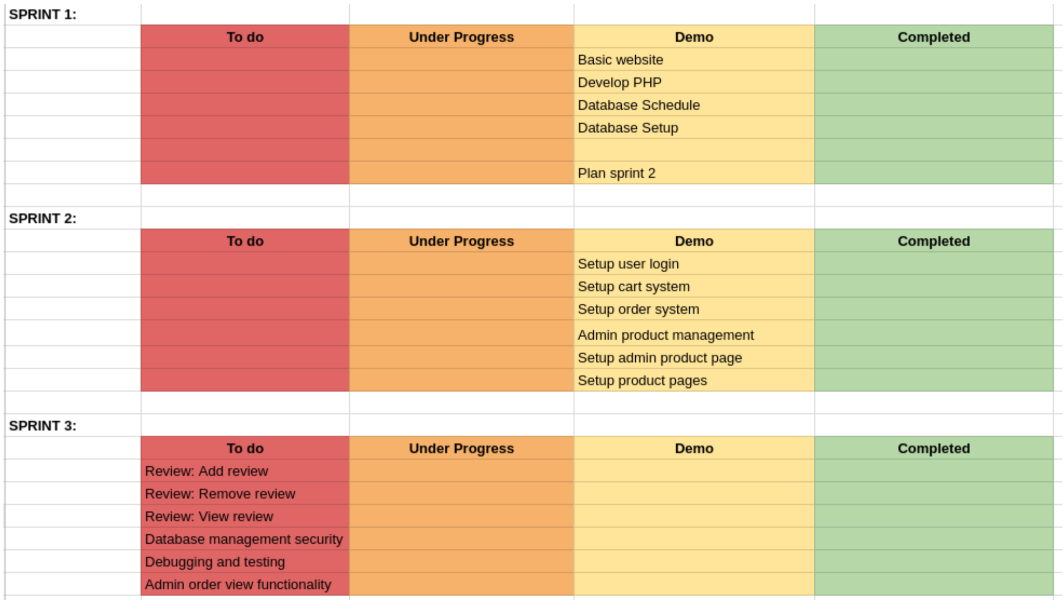
Front end:Redirect page setup.
Back end: Setup the ordering system such that users can add to cart and place orders.

What needs to be done (listed after priority):

1. Setup admin pages (High prio, Total time estimated: 1hrs)
2. Setup login system (High prio, Total time estimated: 3hrs)
3. Setup so that admin can add products (High prio, Total time estimated: 2hrs)
4. Setup cart system (High prio, Total time estimated: 3hrs)
5. Setup order system (High prio, Total time estimated: 1hrs)
6. Plan sprint 3 (Low prio: 1 hrs)

Demo:
Login as admin, add products to the list/database.
Login as user, add products to cart and order.

Figure 2: The point to point version of the project backlog



SPRINT 1:

To do	Under Progress	Demo	Completed
		Basic website	
		Develop PHP	
		Database Schedule	
		Database Setup	
		Plan sprint 2	

SPRINT 2:

To do	Under Progress	Demo	Completed
		Setup user login	
		Setup cart system	
		Setup order system	
		Admin product management	
		Setup admin product page	
		Setup product pages	

SPRINT 3:

To do	Under Progress	Demo	Completed
Review: Add review			
Review: Remove review			
Review: View review			
Database management security			
Debugging and testing			
Admin order view functionality			

Figure 3: The table version of the project backlog

As we can already see, the original thought and the actual path differentiates since we decided to not use node.js but instead use php to write the back end of the server.

5 Database schema

Every user must have a unique email since the email is used as login identifier, but it's not primary key. For each product the user may leave one review. Every user may only have one shopping cart, which is listed in a large shopping cart table where every users shopping cart is listed. This is not a very secure way of doing things, but we decided that it worked best for this particular case where security is not prioritized. This also results in the database schema doesn't look as 'connected' as previously, since the constrains is instead being fixed in php.

Shipment will probably not be used but it's there until finalizing design decisions in sprint 3.

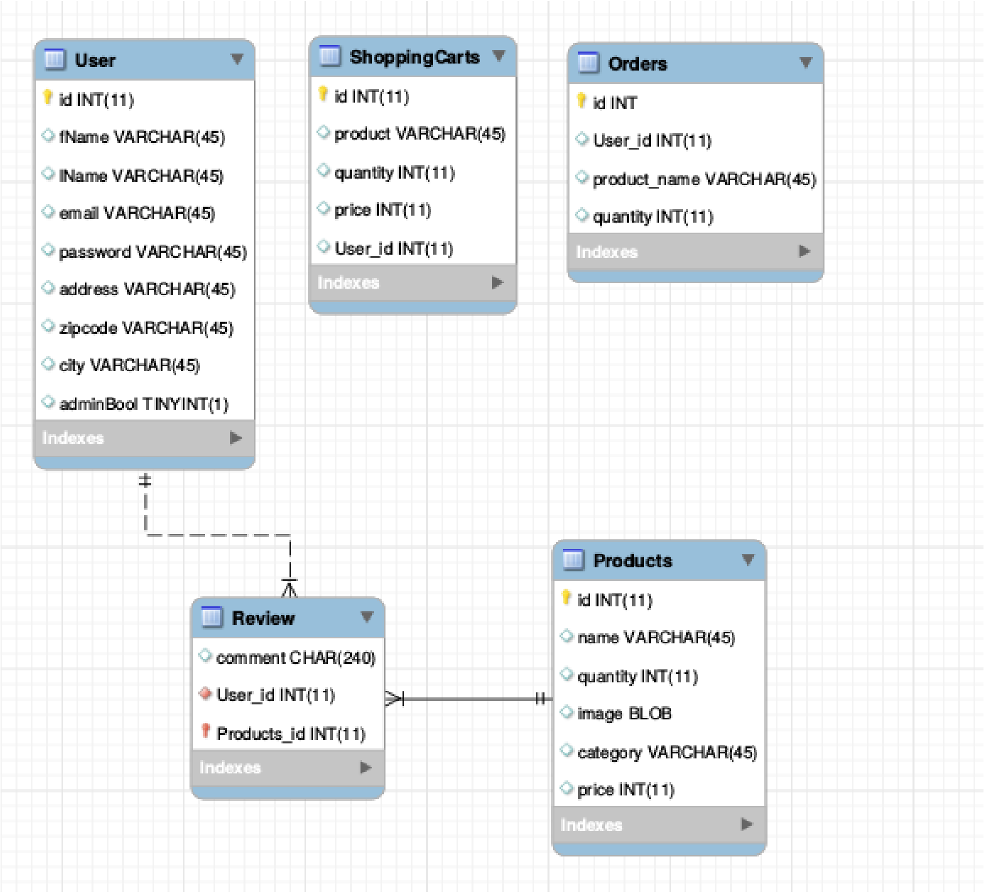


Figure 4: The database schema

6 Test case specifications

Regular user:

1. Create user account.
2. Log in.
3. Browse the products.
4. Add Products to cart.
5. Remove unwanted products from the cart.
6. Order the products.
7. Write a review.
8. Remove your review if wanted.
9. Log out.

Admin:

1. Log in to admin account.
2. Add wanted products to the list.
3. Remove unwanted products from the product list.
4. Remove unnecessary reviews.
5. Watch orders.
6. Add products to cart.
7. Remove unwanted products from the cart.
8. Order the products.
9. Write a review.
10. Remove your review if wanted.
11. Log out.

7 Limitations and improvements

One limitation for now is that admin cant upload an image when adding a product, this is because we have not yet found a good solution for it. There are however alot of possible improvements, such as editing user information, pick a color for products, writing reviews (planned to implement in sprint 3) and password encryption.

8 Links

Link to git repository