

Soal LKS Web Technologies

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I CMS Module

Introduction

You are asked to develop a new website for the Village Website. Your client is a Village Head who wants to create a Village Website as a means of sharing public information regarding his village. The name of the village is Sukatani Village, where most of the population work as farmers.

Description of Project and Tasks

This module involves knowledge about website design, website layout techniques, client-side scripting, and server-side scripting, all combined in one CMS project. You will be using one of the most popular content management systems - WordPress.

Your task is to develop a website supported by a content management system. You are free to choose the theme and page builder you want.

The purpose of this website is to display the latest news about Sukatani village. Newsletters can contain a list of upcoming events. This website is expected to be a means for Sukatani village residents to quickly and easily get the latest information about their village. Also for anyone who wants to find information about Sukatani village. Target audience for this website is in particular all elements of society in Sukatani village, and generally all corners of the world as an attraction for many people from outside the village to visit Sukatani village. Also make sure you have one header and slogan defined in the content management system.

Requested Output

1. Responsive village website using WordPress CMS

Content Management System

For administration tasks, we need two user profiles, Admin and Editor:

- The Admin user - access to the complete WordPress main dashboard.
 - Username: admin24
 - Password: 24admin#
- The Editor user – access as editor role in the CMS.
 - Username: editor24
 - Password: 24editor#

We want the CMS login page to be white-label. That means the login page should not show the CMS default logo and add all the editor's logos.

Also the login page should not include any "wp" wordings for white-label reasons. Please make the backend admin URL as following: <host>/admin/

Managing News and pages

The client wants to be able to add, edit, update, delete news records.

News Blog Post

From time to time, there will be news from the website as well as from specific editors. These blog posts should be categorized.

The client wants to show news posts from all categories in the home page. While in the specific editor page, the client wants to show news posts from only the category for the news.

Post Categories

- News
- Events
- Announcements
- Reports

Pages and URL Strategy

Accessibility is very important to our website. We would like to leverage different levels of accessibility optimization.

News posts should have following URL structure:

- All news: <host>/news/
- News from a category: <host>/news/<category name>

Dashboard Configuration

The client wants to have At a Glance, Activity, Quick Draft in the dashboard. Please configure these dashboard widgets and remove all others in the dashboard.

Menus

The menu should stick to the top when scrolling down the page. The menu has the following items.

- Home
- Village Profile
- News

II Client Side Module

Introduction

You are asked to develop a game called Space Defender using HTML, CSS and JavaScript. Space Defender is a classic arcade game that combines action-packed shooting with a space theme. Players will control a spacecraft to combat an alien armada that threatens Earth.

Objective

The main objective of the player is to protect Earth from alien attacks by destroying the entire alien armada before they reach the Earth's surface.

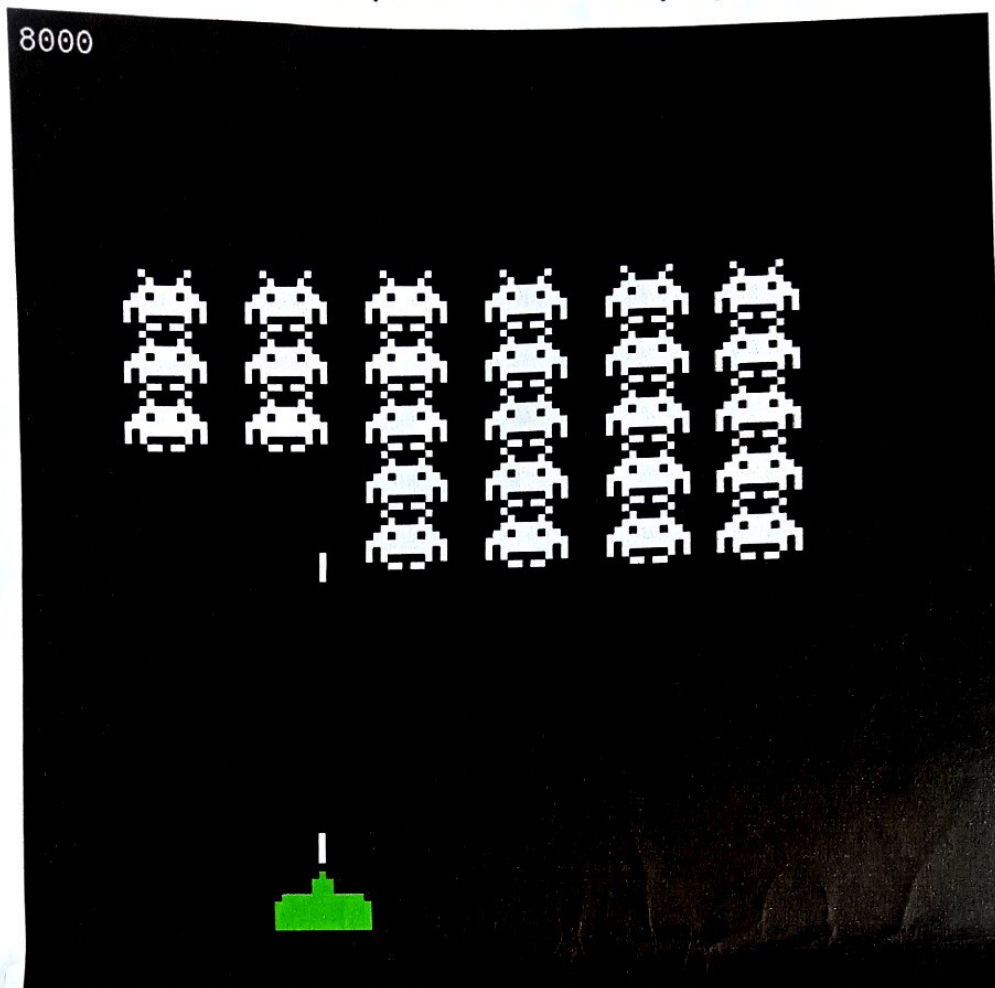
Requested Output

1. Game Design (png/jpg)
2. Demonstrate it when finished to the jury.
3. Game source-code in the format name_nourut_school_moduleclientside

Key Features

1. **Welcome Screen:** Upon starting the game, players will be greeted with a welcoming screen displaying the game title and options to start the game, access settings, or view the leaderboard.
2. **Spacecraft Control:** Players can maneuver the spacecraft using arrow keys to move right, left, forward, and backward.
3. **Shooting:** Players can fire lasers from the spacecraft to destroy aliens by pressing the "space" button.
4. **Alien Armada:** There are various types of aliens with different speeds and movement patterns. Some aliens may have additional shields or special attacks.
5. **Progressive Difficulty:** The difficulty level will increase as the game progresses, with faster and stronger aliens appearing.
6. **Scoring and Leaderboard:** Players will earn points based on the number of aliens successfully destroyed. The highest scores will be displayed on the leaderboard.
7. **Sound and Music:** There will be sound effects for shooting, explosions, and background music to enhance the gaming atmosphere.

Example of Game Display



III REST API Module

Introduction

You are asked to develop a RESTfull API for a Password Management SAAS application. The application has 2 account roles, namely Admin and User.

Requested Output

1. Export Database (.sql)
2. Database Diagram (.jpg)
3. REST API source-code in the format name_nourut_school_modulereestapi

Role Admin

1. User Management:
 - Create user data
 - View user data
 - Editing user data
 - Deleting user data
2. Password Management:
 - Add account password
 - View account password
 - Edit account password
 - Delete account password
3. Authorization
 - Can manage all user data
 - Can manage all password management data

Role Pengguna

1. Account Management:
 - Register as a user
 - Set user profile (full name, email, profile photo)
 - Delete account
2. Password Management:
 - Add account password
 - View account password
 - Edit account password
 - Delete account password
3. Authorization
 - Can only process its own profile
 - Can only process its own password management

IV Front End Module

Introduction

You are asked to develop a front end application to display the RESTfull API that was created in Module III.

Front End web app must meet the below requirements:

1. Landing Page containing:
 - Register and Login Button
 - Explanation with illustrations of the Password Management application
 - Total users who have registered

- Total Passwords of all users
- 2. Registration Page
- 3. Login Page
- 4. Profile Page
- 5. Dashboard Page
- 6. All pages must be responsive

Requested Output

1. Landing Page Design (using figma or other tools)
2. Front End source-code in the format name_nourut_school_modulefrontend

Competition Value Weighting

No	Module	Weight
I	CMS	20
	CMS Elemen sesuai soal	5
	Kesesuaian tema	5
	Role pada CMS	5
	Desain responsif	5
II	Client Side	30
	Meet all requirements	10
	The game can run smoothly	10
	Game features improvement	10
III	Rest API	20
	User Management	6
	Password Management	6
	Authentication and Authorization	8

IV	Front End	30
	Landing Page	5
	Registration Page	5
	Login Page	5
	Profile Page	5
	Dashboard Page	5
	Responsive Page	5