# Personal Blog Website

#### Introduction

Blogs are frequently updated web pages used to commentate personal or business content. Blog websites serve a multitude of purposes which could involve increasing website traffic, educational content, or critical feedback on services or products. More specifically, personal blog websites allow individuals to create personalised content, which ultimately builds character identity on the web and allows the online community to recognise their contribution and presence.

## **Purpose**

The purpose of this personal blog website is to highlight the experience and perspective of a software engineering student at UNSW. My aim is to encapsulate my personal skills as an aspiring Software Engineer and demonstrate my technical and individual characteristics, and interests as a person. Aside from demonstrating my skills, creating personal content posts is a gratifying hobby I enjoy.

## Scope

#### Problem Statement

Online presence is pivotal for building character recognition in present society as the general public heavily manipulates the web to learn and adapt to new changes in the community. To be recognised and self promote, it is imperative to develop an online presence to create personal growth and identification.

#### Goal

The goal of this project is to highlight my personality and technical skills, and encapsulate these qualities through demonstrating my background or industry experience, personal projects, and day to day progression.

#### Content and Features

The conceptual idea of the blog website is to showcase my personality, any relevant projects or experience, and progressions as a student and person. When a user visits the website, the landing page will automatically redirect to the home page. The homepage will contain content features about who I am, what I do and a general synopsis of any experience or skills I have.

The website will be divided into specific sections which include the home page, personal projects page, blog posts page and a contact page.

The home page is to be laid out in a portrait format which is sectioned off into boxes, whereby it will contain any relevant text or images describing my character. The page will also contain a hyperlink to download my digital resume.

The personal projects page will contain all relevant projects I have created. Sample images of the project will display on the left of a row and the description of the project will display on the right. Within each description of the project, it will include the frameworks and languages used, and a hyperlink to my github repository where users can read my code.

The blog posts page will display in a grid format. There will be a thumbnail for each post with the title of the blog. Users will be able to click on these thumbnails and be redirected to read the blog post. The grid will be ordered from most recent to older posts. Users will be able to subscribe by clicking the subscribe button and writing their email.

The contact page will display information about how the user can get into contact with me. It will include my linkedIn and email. If users had any enquiries, they are also able to fill in an enquiry box given their name, email and description.

#### **Functionality**

Most of the pages will be view only, meaning there will not be many interactions within the page unless they choose to redirect to a different section. However, the few functionalities that are included are the hyperlinks to download my resume, submitting an enquiry and subscribing to the personal blog posts.

The purpose of the homepage is for the user to familiarise themself with who I am and what I do. Their interaction with the page will be to read the content and download my resume if they are interested. The hyperlink will be included near the top of the page and the end. Users will be able to scroll down if necessary. The personal projects page will also be viewed only unless users decide to click on the hyperlinks on the page, whether that is to download a report or redirect to my github repository. More extensive interactions will be more involved with the blog page and contact page. The blog page will allow users to redirect to other pages whereby it will contain more verbose descriptions of the current blog post. Users will also be able to click a button to subscribe and be redirected to a page where they will enter their personal information to formally subscribe to the posts. They will be notified via email when a new blog post has been added. In the contact page, users will be able to input their name, email and description of the enquiry and submit the form. They will receive a response via the given email.

#### Design Elements

The aesthetic of a website is imperative as it captures the users attention and emotes a certain feel to the frontend of the website. This includes the use of colours and themes, interactivity and movement, and effects and textures.

The use of light pastel colours will allow a softer visual for the users eyes and a more casual feel to the website. Text and description will be darker colours to ensure users can differentiate between text and background. These colours coupled with glass morphism will allow emphasis on important features of the website and structure to elements of the page. Glass morphism will provide texture instead of plain solid colours, giving a floating effect.

Additionally, a mix of different sized typographies will create an eccentric and eye-catching effect, dualed with block like fonts for easier readability. Primary information will have the traditional vertical scrolling whilst secondary information will have horizontal scrolling. Horizontal scrolling on secondary information not only provides easy presentation, however it enables the user to feel like they are scrolling through a gallery. Users will also have increased accessibility through the navigation bar at the top of the page which redirects them to relevant pages. For users who have impaired or limited vision, alt tags will be provided.

#### Technical requirements

The technology stack of the project determines the performance, scalability, and maintainability of the website. The programming languages used for the frontend of the website will include javascript, html and css. Javascript is a high level, dynamic and versatile language. It is used primarily for web development allowing developers to create dynamic and interactive web pages. Developers can manipulate the content in real time, respond and validate user input, and create animations and effects. React is a javascript framework which will also be used. It enables flexibility from its modular structure and maintainability.

Since the website will be regularly updated with new blog posts, a database is needed to store all the content. As I'm familiar with SQL, the data will be stored using PostgreSQL.

The backend of the website will use NodeJS and Express. Use nodemailer to send enquiries to myself. Used gmail app password for more security (no lomnger have less secure app access).

The types of tools which will be used include VScode, github, material UI/bootstrap and (back end tools).

Deploy website using AWS

#### **Resource allocation**

• Technological resources: identify tools necessary to carry out activities in project e.g. selecting appropriate programming languages, development environments (local computer), hosting services (web hosting, cloud hosting, managed hosting)

#### **Timeline**

• gantt chart

### **Analysis**

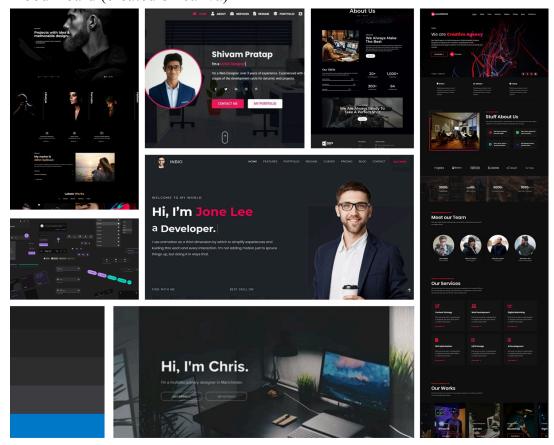
• Requirement Gathering: Define what content and sections your website will have (about, projects, contact, etc.).

#### 4 sections:

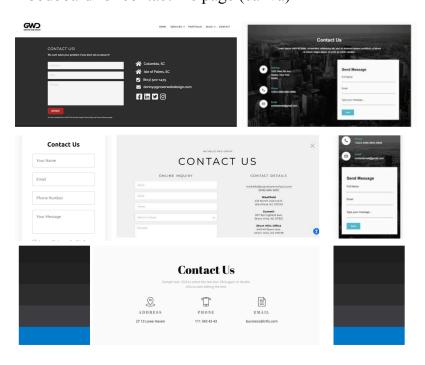
- 1. About me: showcase my personality, see my resume, helps form strong connections with users
- 2. Personal projects: show my experience and skills
- 3. Blogs: personal commentary
- 4. Contact me: socials, enquiries, all ways to contact me
- Content Strategy: Plan the type of content (text, images, videos) and how it will be presented.
- 1. About me:
  - a. Mainly text, relevant images of myself, link to download resume
- 2. Personal projects:
  - a. Will be presented into sections, row layout
  - b. Each project will show what frameworks and languages I used, link to my code, a description and images of the project when necessary
- 3. Blogs:
  - a. Presented in a grid like layout from most recent to older blogs
  - b. Each blog will have a thumbnail, title and date
  - c. When blogs are clicked it will redirect to the specific blog. This page will be laid out in row format for readability.
- 4. Contact me
  - a. The top of this page will show my socials straight away

- b. There will be a form at the bottom of the page if users have any enquiries.
- Design Preferences: Decide on the layout, colour scheme, and overall visual style.
  - o Dark theme, bold
  - o Maybe one distinct colour blue or purple, not sure yet

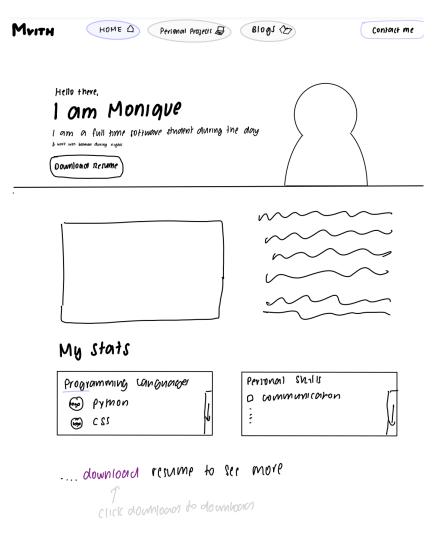
Mood Board (created on canva)

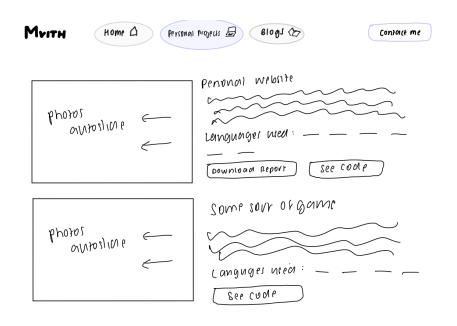


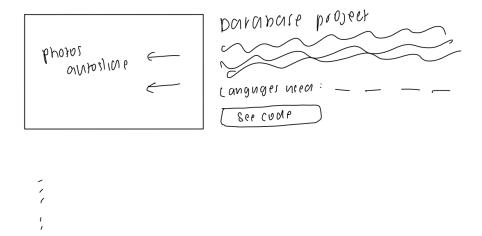
Moodboard for contact me page (canva)



# Rough sketches of design (goodnotes)







## Design

- High-level design: This focuses on the system architecture and overall structure of the software. It involves defining the system components, their interactions, and the overall flow of data and control within the system. HLD includes decisions regarding the choice of technology, platforms, and frameworks.
  - Wireframing/Prototyping: Create sketches or use software to outline the layout and structure of your site.
  - Visual Design: Develop the graphical elements, such as logos, graphics, and UI components, based on your preferences.

Key activities in the design phase include:

- System Architecture Design: Defining the overall structure of the software, including how different modules or components will interact and communicate with each other.
- User Interface (UI) Design: Creating mockups, prototypes, or wireframes to visualise and design the user interface elements and user experience based on user requirements and usability principles.

# **Implementation**

- Development: Write HTML, CSS, and JavaScript code to build the website based on the design and content plan.
- Content Creation: Create and organise the text, images, and multimedia content for each page or section.
- Testing: Test the website for responsiveness, functionality, and compatibility across different browsers and devices.

# **Testing**

- Fix bugs or issues
- Ensure software meets requirements and works as expected

 https://docs.google.com/spreadsheets/d/1DE2eijAKJjt\_ekS3A8EFofLTme2bkq uGiWdiC PfnQA/edit?usp=sharing

## **Deployment**

- Release product to end users
- Domain and Hosting Setup: Purchase a domain name and choose a hosting provider.
- Upload and Configuration: Upload your website files to the hosting server and configure settings.
- Launch: Make your website live for visitors to access.

#### Maintenance

- Regular updates, bug fixes, improvements
- User feedback
- Regular Updates: Keep your content fresh, update information, and add new features or sections as needed.
- Security Checks: Regularly check for vulnerabilities and apply necessary security updates.
- Performance Optimization: Monitor and optimise the website's speed and performance.

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