

# Developer Document – Portfolio Website

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Program: Interactive Media Design

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## 1. Project Overview

For this term I'm building my professional portfolio website. It will be the main place for people to learn about me, explore my skills, and see my work. I designed the wireframe to be fun and interactive, while still keeping it simple so it's easy to navigate. I want the site to feel like where it all begins: playful and kid-like, with interactive elements that invite people to explore each page, while still showing my technical skills and creativity.

### Goals

1. Showcase all my creative work in one place  
My portfolio will be the central hub for my design, development, motion, and 3D projects. Instead of spreading my work across different platforms, everything will be collected here in one interactive space.
2. Reach employers and potential clients  
This site is not just for class usage or submission, it's meant to be professional and useful beyond school. Employers and clients will be able to quickly see who I am, what I do, and why I'd be a strong fit for their team or project.
3. Demonstrate technical skills through the build itself  
The site will act as proof of my skills, using HTML, SCSS, JavaScript, GSAP, PHP, and MySQL. It's not only a showcase of my work, but also a technical project that highlights both design and development abilities.
4. Create a playful yet professional online identity  
My portfolio is designed with a kid-like sense of interactivity to make it feel fun and approachable, while still keeping a clean and professional structure. My brand identity, pastel colors, simple layouts, and consistent typography, will reflect both my creativity and professionalism.
5. Build something that can grow with me  
This portfolio won't end with this course. It's designed to expand as I add more projects, refine my skills, and possibly include future sections like achievements, blogs and testimonials.

### Objectives

1. Show 3–4 strong work pieces with process and results  
Each project will include not only the final outcome but also the steps behind it—tools, choices, and workflow, to give insight into my creative process.

2. Create an animated name intro linked to my demo reel  
My name animation will appear on the homepage and also connect to my demo reel. It will create a consistent and engaging introduction across both the site and video, while also previewing my featured works inside the reel. This gives viewers a shortcut to explore my projects in a more dynamic way.
3. Use animations to enhance, not overwhelm  
I'll use GSAP for small animations like fade-ins and project cards appearing one by one. These will make the site feel more dynamic while keeping the focus on the content.
4. Keep the design consistent with my personal brand  
Fonts, colors, and icons will follow my established brand guidelines to maintain consistency. This ensures that the site feels polished, recognizable, and aligned with my creative identity.
5. Ensure full responsiveness  
The site will be tested on multiple screen sizes to confirm that it looks and works properly across desktop, tablet, and mobile. Navigation, layout, and animations will adapt for a seamless user experience.

## 2. Technical Documentation

### 2.1 Tech Stack

- Frontend: HTML5, CSS3 (SCSS), JavaScript, GSAP
- Backend: PHP
- Database: MySQL
- Version Control: GitHub

### 2.2 System Architecture

The site will include both static and dynamic sections.

**Static Pages:** Home, About, Contact.

**Dynamic Pages (PHP + MySQL):**

- Work → projects loaded dynamically from database.
- Contact → save or email form submissions.
- Testimonials → optional/coming soon, can pull client/peer feedback from database.
- Blog/Services → future expansions.

### 2.3 HTML

- Semantic structure: header, nav, main, section, footer.
- Accessible: descriptive alt text for images, meaningful links, logical heading order.
- Responsive layout: grid system across breakpoints.

## 2.4 SASS (7-1 Architecture)

The project will follow a **7-1 pattern** for SCSS organization:

- **abstracts/** → `_variables.scss`, `_mixins.scss`, `_fonts.scss`
- **base/** → `_reset.scss`, `_typography.scss`, `_index.scss`
- **components/** → `_buttons.scss`, `_cards.scss`, `_forms.scss`
- **layout/** → `_header.scss`, `_nav.scss`, `_footer.scss`, `_grid.scss`
- **pages/** → `_home.scss`, `_about.scss`, `_work.scss`, `_contact.scss`
- **themes/** → optional theme files for colors/brand variations
- **vendors/** → third-party libraries or overrides

**\*\* main.scss** is the entry file. It imports all partials and compiles into **main.css** linked

## 3. Sitemap

- **Home:** Hero intro + featured work.
- **About:** Bio, skills, resume download.
- **Work:** Dynamic gallery from database.
- **Contact:** PHP/MySQL form.
- **Testimonials (Optional / Coming Soon):** Section for feedback from employers, professors, clients.
- **Optional:** Blog, Services.

## 4. ERD Diagram

Entities & Attributes

### 1. Project

- ProjectID (PK)
- Title
- Description
- Date
- Category

### 2. Project Works

- WorkID (PK)
- ProjectID (FK)
- WorkTitle
- WorkDescription
- ToolsUsed

### 3. Skills

- SkillID (PK)
- SkillName
- Level

#### 4. Roles

- RoleID (PK)
- RoleName

#### 5. Videos

- VideoID (PK)
- ProjectID (FK)
- VideoURL
- Description

#### 6. Images

- ImageID (PK)
- ProjectID (FK)
- ImageURL
- AltText

#### 7. ProjectSkills (linking table)

- ProjectID (FK)
- SkillID (FK)
- (PK = ProjectID + SkillID)

#### 8. ProjectRoles (linking table)

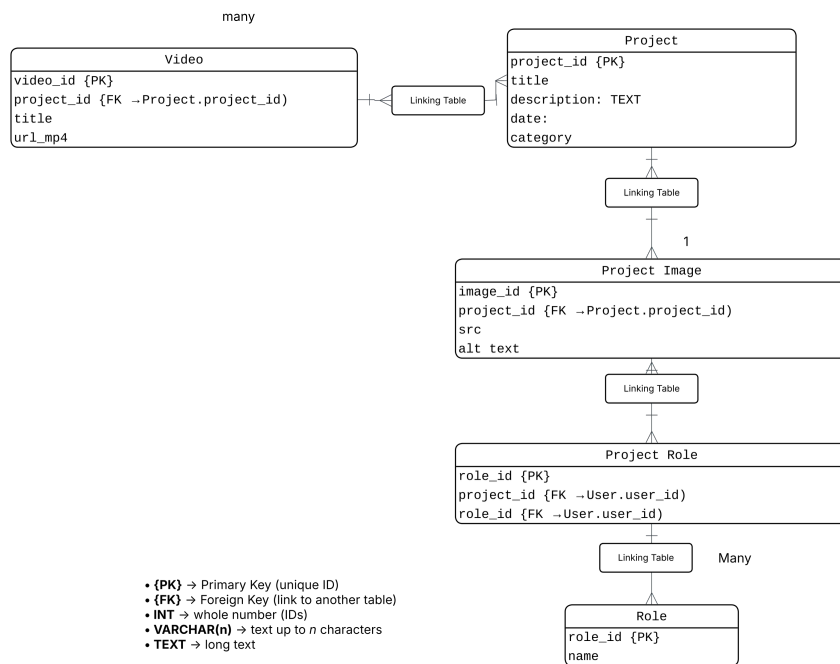
- ProjectID (FK)
- RoleID (FK)
- (PK = ProjectID + RoleID)

#### Relationships

- One Project → many Works, Videos, Images
- Many Projects ↔ Many Skills (via ProjectSkills)
- Many Projects ↔ Many Roles (via ProjectRoles)

## Portfolio Website – Entity Relationship Diagram (ERD)

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## 5. Page Structure

I plan to use a multi-page site.

- **Pages:** Home, About, Skills, Work, Contact (required), Testimonials (optional/ coming soon)
- **Dynamic:** Work and Contact will use PHP/MySQL
- **Navigation:** consistent links across all pages

## 6. GSAP Animations

GSAP will be used for lightweight animations to enhance the site experience:

- **Navigation** → smooth scroll transitions
- **Logo** → puzzle-style pieces animate in and connect together
- **Sections** → fade in on scroll
- **Work cards** → staggered reveal animation
- **Hero background** → subtle parallax shift

## References (Docs & CodePens):

- GSAP Docs: <https://gsap.com/docs/v3/>
- GSAP Timeline: <https://gsap.com/docs/v3/GSAP/Timeline/>
- Puzzle Logo Animation: [Sizzle Puzzle GSAP \(KirdesMF\)](#)
- Animated Puzzle Pieces: [SVG Puzzle \(biokillos\)](#)
- Logo Animation Idea: [GSAP Name Animation \(sonAndrew\)](#)
- Basic Stagger Example: [GSAP Staggers](#)
- ScrollTrigger + Stagger: [Scroll Example](#)
- Grid/Card Stagger: [Stagger Grid Demo](#)

## 7. JavaScript / Interactivity

JavaScript will handle the interactive functionality:

- Navigation – Smooth scrolling, mobile burger menu toggle
- Hero Section – Name and tagline animation on load
- Scroll Effects – Sections fade in while scrolling
- Work Section – Cards stagger in; details open with modal/slider
- Hover Effects – Cards animate on hover (zoom, color shift)
- Contact Form – Validation before submission
- Demo Reel – Custom video controls
- Skills/About – Drag-and-drop info cards, sliding panels

### Logo Animation

The logo will animate with separate pieces sliding and connecting into one complete design.

