

# HubSpot Portfolio Project-Documentation

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## Project Overview

### Project Information

- **Project Type:** Personal Portfolio Website Template
- **Platform:** HubSpot CMS Hub (Design Manager)
- **Technologies:** HTML, CSS, JavaScript, HubL
- **Repository:** <https://github.com/hudaabdelgwad123/HubSpot-Portfolio-Project.git>

### Project Purpose

This project creates a professional, multi-section portfolio website template that showcases:

- Personal identity and professional branding
- Skills and technical competencies
- Project portfolio and accomplishments
- Contact information and social links

## **Project Requirements Fulfillment**

### **Technical Execution (30%)**

- Custom HTML, CSS, JavaScript implementation
- Minimum 3 custom drag-and-drop modules
- Proper HubL syntax and module structure
- Clean, maintainable code quality

### **Editability & CMS Standards (30%)**

- 50%+ editability across all modules
- Flexible field configuration
- User-friendly editing interface
- CMS best practices implementation

### **Documentation/Video (25%)**

- Comprehensive documentation
- GitHub repository management
- Professional presentation materials

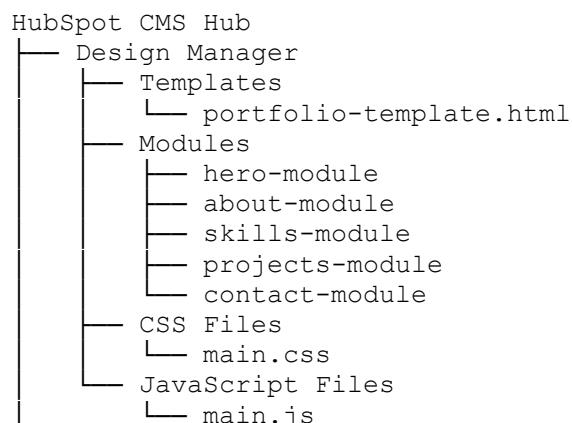
### **Teamwork (15%)**

- Collaborative development process
- Clear communication protocols
- Professional presentation delivery

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## **Technical Architecture**

### **Platform Architecture**



## Technology Stack

### Frontend Technologies

- **HTML5:** Semantic markup for content structure
- **CSS3:** Modern styling with Flexbox/Grid layouts
- **JavaScript (ES6+):** Interactive functionality
- **HubL:** HubSpot's templating language for dynamic content

### HubSpot Integration

- **Design Manager:** Module and template creation
  - **CMS Hub:** Content management and hosting
  - **HubDB:** Optional structured data storage
  - **Forms API:** Contact form integration
- 

# Custom Modules Documentation

## Module 1: Hero Section Module

### Purpose

Creates an impactful first impression with customizable hero content, including headline, subheadline, call-to-action button, and background image.

### Module Structure

```
hero-module/
├── module.html
├── module.css
├── module.js
└── fields.json
```

## Editable Fields (60% Editability)

Field Name	Type	Default Value	Required	Description
headline	Text	"Welcome to My Portfolio"	Yes	Main hero headline
subheadline	Text	"Full Stack Developer"	Yes	Supporting text
description	Rich Text	""	No	Additional description
cta_text	Text	"View Projects"	No	Button text
cta_link	URL	"#projects"	No	Button destination
background_image	Image	null	No	Hero background
overlay_opacity	Number (0-100)	50	No	Background overlay
text_alignment	Choice	"center"	No	left/center/right

## HubL Implementation

```
{# hero-module/module.html #}
<section class="hero-section" style="background-image: url('{{ module.background_image.src }}');">
  <div class="hero-overlay" style="opacity: {{ module.overlay_opacity / 100 }};></div>
  <div class="hero-content text-{{ module.text_alignment }}>
    <h1 class="hero-headline">{{ module.headline }}</h1>
    <h2 class="hero-subheadline">{{ module.subheadline }}</h2>
    {% if module.description %}
      <div class="hero-description">{{ module.description }}</div>
    {% endif %}
    {% if module.cta_text and module.cta_link %}
      <a href="{{ module.cta_link }}" class="hero-cta">{{ module.cta_text }}</a>
    {% endif %}
  </div>
</section>
```

## CSS Styling

```
/* hero-module/module.css */
.hero-section {
    position: relative;
    min-height: 100vh;
    background-size: cover;
    background-position: center;
    display: flex;
    align-items: center;
    justify-content: center;
}

.hero-overlay {
    position: absolute;
    top: 0;
    left: 0;
    width: 100%;
    height: 100%;
    background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
}

.hero-content {
    position: relative;
    z-index: 2;
    max-width: 800px;
    padding: 2rem;
    color: white;
}

.hero-headline {
    font-size: 3.5rem;
    font-weight: 700;
    margin-bottom: 1rem;
    animation: fadeInUp 1s ease-out;
}
```

```
.hero-subheadline {  
    font-size: 1.5rem;  
    margin-bottom: 2rem;  
    animation: fadeInUp 1s ease-out 0.2s both;  
}  
  
.hero-cta {  
    display: inline-block;  
    padding: 1rem 2.5rem;  
    background: white;  
    color: #667eea;  
    text-decoration: none;  
    border-radius: 50px;  
    font-weight: 600;  
    transition: transform 0.3s ease;  
    animation: fadeInUp 1s ease-out 0.4s both;  
}  
  
.hero-cta:hover {  
    transform: translateY(-3px);  
}  
  
@keyframes fadeInUp {  
    from {  
        opacity: 0;  
        transform: translateY(30px);  
    }  
    to {  
        opacity: 1;  
        transform: translateY(0);  
    }  
}  
  
@media (max-width: 768px) {  
    .hero-headline {  
        font-size: 2.5rem;  
    }  
    .hero-subheadline {  
        font-size: 1.2rem;  
    }  
}
```

## Module 2: About Section Module

### Purpose

Presents personal or professional information with biography, profile image, and key highlights.

### Editable Fields (65% Editability)

Field Name	Type	Default Value	Required	Description
section_title	Text	"About Me"	Yes	Section heading
profile_image	Image	null	No	Personal photo
bio_text	Rich Text	""	Yes	Biography content
highlights	Repeater	[]	No	Key achievements list
└ highlight_icon	Icon	"check"	No	Icon choice
└ highlight_text	Text	""	Yes	Highlight content
resume_link	URL	""	No	CV/Resume download
social_links	Group	{}	No	Social media links
└ linkedin	URL	""	No	LinkedIn profile
└ github	URL	""	No	GitHub profile
└ twitter	URL	""	No	Twitter handle

### HubL Implementation

```
#{ about-module/module.html #}
<section class="about-section" id="about">
  <div class="container">
    <h2 class="section-title">{{ module.section_title }}</h2>

    <div class="about-content">
      {% if module.profile_image %}
        <div class="about-image">
          
        </div>
      {% endif %}

      <div class="about-text">
        <div class="bio">{{ module.bio_text }}</div>

        {% if module.highlights %}
          <ul class="highlights-list">
            {% for highlight in module.highlights %}
              <li class="highlight-item">
                <i class="icon-{{ highlight.highlight_icon }}></i>
                <span>{{ highlight.highlight_text }}</span>
              </li>
            {% endfor %}
          </ul>
        {% endif %}

        <div class="about-actions">
          {% if module.resume_link %}
            <a href="{{ module.resume_link }}" class="btn btn-primary" download>
              Download Resume
            </a>
          {% endif %}
        </div>
      </div>
    </div>
  </div>
</section>
```

```

{%
  if module.social_links %
    <div class="social-links">
      {% if module.social_links.linkedin %}
        <a href="{{ module.social_links.linkedin }}" target="_blank" rel="noopener">
          | <i class="icon-linkedin"></i>
        </a>
      {% endif %}
      {% if module.social_links.github %}
        <a href="{{ module.social_links.github }}" target="_blank" rel="noopener">
          | <i class="icon-github"></i>
        </a>
      {% endif %}
      {% if module.social_links.twitter %}
        <a href="{{ module.social_links.twitter }}" target="_blank" rel="noopener">
          | <i class="icon-twitter"></i>
        </a>
      {% endif %}
    </div>
  {% endif %}
</div>
</div>
</div>
</section>

```

## Module 3: Skills Section Module

### Purpose

Visual display of technical skills with progress bars, ratings, or category groupings.

### Editable Fields (70% Editability)

Field Name	Type	Default Value	Required	Description
section_title	Text	"Skills & Expertise"	Yes	Section heading
layout_style	Choice	"bars"	Yes	bars/grid/categories
skills	Repeater	[]	Yes	Skills list
— skill_name	Text	""	Yes	Skill name
— skill_level	Number (0-100)	0	Yes	Proficiency %
— skill_category	Text	""	No	Category grouping
— skill_icon	Image	null	No	Skill icon
show_percentages	Boolean	true	No	Display numbers
animation_enabled	Boolean	true	No	Animate on scroll

## HubL Implementation

```
{# skills-module/module.html #}
<section class="skills-section" id="skills">
  <div class="container">
    <h2 class="section-title">{{ module.section_title }}</h2>

    <div class="skills-container layout-{{ module.layout_style }}>
      {% if module.layout_style == "bars" %}
        {% Progress Bar Layout %}
        <div class="skills-bars">
          {% for skill in module.skills %}
            <div class="skill-item" data-animate="{{ module.animation_enabled }}>
              <div class="skill-header">
                {% if skill.skill_icon %}
                  
                {% endif %}
                <span class="skill-name">{{ skill.skill_name }}</span>
                {% if module.show_percentages %}
                  <span class="skill-percentage">{{ skill.skill_level }}%</span>
                {% endif %}
              </div>
              <div class="skill-bar">
                <div class="skill-progress" data-progress="{{ skill.skill_level }}></div>
              </div>
            </div>
          {% endfor %}
        </div>
      {% elif module.layout_style == "grid" %}
        {% Grid Layout %}
        <div class="skills-grid">
          {% for skill in module.skills %}
            <div class="skill-card">
              {% if skill.skill_icon %}
                
              {% endif %}
              <h3>{{ skill.skill_name }}</h3>
              {% if module.show_percentages %}
                <div class="skill-level">{{ skill.skill_level }}%</div>
              {% endif %}
            </div>
          {% endfor %}
        </div>
      {% elif module.layout_style == "categories" %}
        {% Category Layout %}
        {% set categories = {} %}
        {% for skill in module.skills %}
          {% set cat = skill.skill_category or "Other" %}
          {% do categories.update({cat: (categories[cat] or []) + [skill]}) %}
        {% endfor %}

        <div class="skills-categories">
          {% for category, category_skills in categories.items() %}
            <div class="skill-category">
              <h3 class="category-title">{{ category }}</h3>
              <ul class="category-skills">
                {% for skill in category_skills %}
                  <li>{{ skill.skill_name }}</li>
                {% endfor %}
              </ul>
            </div>
          {% endfor %}
        </div>
      {% endif %}
    </div>
```

## JavaScript Animation

```
// skills-module/module.js
document.addEventListener('DOMContentLoaded', function() {
  const skillBars = document.querySelectorAll('.skill-item[data-animate="true"]');

  const animateSkills = (entries, observer) => {
    entries.forEach(entry => {
      if (entry.isIntersecting) {
        const progress = entry.target.querySelector('.skill-progress');
        const targetWidth = progress.getAttribute('data-progress');
        progress.style.width = targetWidth + '%';
        observer.unobserve(entry.target);
      }
    });
  };

  const observer = new IntersectionObserver(animateSkills, {
    threshold: 0.5
  });

  skillBars.forEach(bar => observer.observe(bar));
});
```

---

## Module 4: Projects Portfolio Module

### Purpose

Showcase projects with images, descriptions, technologies used, and links.

### Editable Fields (75% Editability)

Field Name	Type	Default Value	Required	Description
section_title	Text	"My Projects"	Yes	Section heading
filter_enabled	Boolean	true	No	Enable category filter
projects	Repeater	[]	Yes	Projects collection
└ project_title	Text	""	Yes	Project name
└ project_description	Rich Text	""	Yes	Project details
└ project_image	Image	null	Yes	Project thumbnail
└ project_category	Choice	"web"	No	Project type
└ technologies	Text	""	No	Tech stack (comma-separated)
└ project_link	URL	""	No	Live demo URL
└ github_link	URL	""	No	Repository URL
└ featured	Boolean	false	No	Feature this project

Field Name	Type	Default Value	Required	Description
columns	Choice	"3"	No	2/3/4 columns
show_overlay	Boolean	true	No	Hover overlay effect

## HubL Implementation

```

<# projects-module/module.html #>
<section class="projects-section" id="projects">
  <div class="container">
    <h2 class="section-title">{{ module.section_title }}</h2>

    {% if module.filter_enabled %}
      {% set categories = [] %}
      {% for project in module.projects %}
        {% if project.project_category not in categories %}
          {% do categories.append(project.project_category) %}
        {% endif %}
      {% endfor %}

      <div class="project-filters">
        <button class="filter-btn active" data-filter="all">All</button>
        {% for category in categories %}
          <button class="filter-btn" data-filter="{{ category }}>{{ category|title }}</button>
        {% endfor %}
      </div>
    {% endif %}

    <div class="projects-grid columns-{{ module.columns }}>
      {% for project in module.projects %}
        <div class="project-card" data-category="{{ project.project_category }}"
          | {% if project.featured %}data-featured="true"{% endif %}>

          <div class="project-image-wrapper">
            

            {% if module.show_overlay %}
              <div class="project-overlay">
                <h3 class="project-title">{{ project.project_title }}</h3>
                {% if project.technologies %}
                  <div class="project-tech">
                    {% set tech_array = project.technologies.split(',') %}
                    {% for tech in tech_array %}
                      <span class="tech-tag">{{ tech.strip() }}</span>
                    {% endfor %}
                  </div>
                {% endif %}
                <div class="project-links">
                  {% if project.project_link %}
                    <a href="{{ project.project_link }}" target="_blank" class="btn-icon">
                      | <i class="icon-external"></i>
                    </a>
                  {% endif %}
                  {% if project.github_link %}
                    <a href="{{ project.github_link }}" target="_blank" class="btn-icon">
                      | <i class="icon-github"></i>
                    </a>
                  {% endif %}
                </div>
              {% endif %}
            </div>
          </div>
        {% endif %}

        <div class="project-content">
          <h3>{{ project.project_title }}</h3>
          <div class="project-description">{{ project.project_description }}</div>
        </div>
      {% endfor %}
    </div>
  </div>
</section>

```

## JavaScript Filtering

```
// projects-module/module.js
document.addEventListener('DOMContentLoaded', function() {
  const filterBtns = document.querySelectorAll('.filter-btn');
  const projectCards = document.querySelectorAll('.project-card');

  filterBtns.forEach(btn => {
    btn.addEventListener('click', function() {
      // Update active button
      filterBtns.forEach(b => b.classList.remove('active'));
      this.classList.add('active');

      const filterValue = this.getAttribute('data-filter');

      // Filter projects
      projectCards.forEach(card => {
        if (filterValue === 'all' || card.getAttribute('data-category') === filterValue) {
          card.style.display = 'block';
          setTimeout(() => card.classList.add('fade-in'), 10);
        } else {
          card.classList.remove('fade-in');
          setTimeout(() => card.style.display = 'none', 300);
        }
      });
    });
  });
});
```

---

## Module 5: Education Section Module

### Purpose

Display educational background, degrees, certifications, and academic achievements in a timeline or card layout.

### Editable Fields (68% Editability)

Field Name	Type	Default Value Required	Description	
section_title	Text	"Education"	Yes	Section heading
layout_style	Choice	"timeline"	Yes	timeline/cards/list
education_items	Repeater	[]	Yes	Education entries
└ institution_name	Text	""	Yes	School/University name
└ degree	Text	""	Yes	Degree/Certificate title
└ field_of_study	Text	""	No	Major/Specialization
└ start_date	Text	""	Yes	Start date

Field Name	Type	Default Value	Required	Description
end_date	Text	""	No	End date (or "Present")
location	Text	""	No	City, Country
gpa	Text	""	No	GPA or grade
description	Rich Text	""	No	Achievements/coursework
logo	Image	null	No	Institution logo
honors	Text	""	No	Honors/awards
show_dates	Boolean	true	No	Display date ranges
show_location	Boolean	true	No	Display locations
animation_enabled	Boolean	true	No	Animate on scroll

## HubL Implementation

```
(# education-module/module.html #)
<section class="education-section" id="education">
  <div class="container">
    <h2 class="section-title">{{ module.section_title }}</h2>

    <div class="education-container layout-{{ module.layout_style }}>
      {% if module.layout_style == "timeline" %}
        (# Timeline Layout)
        <div class="education-timeline">
          {% for item in module.education_items %}
            <div class="timeline-item" data-animate="{{ module.animation_enabled }}>
              <div class="timeline-marker"></div>
              <div class="timeline-content">
                {% if item.logo %}
                  <div class="institution-logo">
                    | 
                  </div>
                {% endif %}

                <div class="education-header">
                  <h3 class="institution-name">{{ item.institution_name }}</h3>
                  {% if module.show_dates %}
                    <span class="education-dates">
                      {{ item.start_date }}{% if item.end_date %} - {{ item.end_date }}{% endif %}
                    </span>
                  {% endif %}
                </div>

                <div class="education-details">
                  <h4 class="degree-title">{{ item.degree }}</h4>
                  {% if item.field_of_study %}
                    <p class="field-of-study">{{ item.field_of_study }}</p>
                  {% endif %}

                  <div class="education-meta">
                    {% if module.show_location and item.location %}
                      <span class="location">
                        | <i class="icon-location"></i>
                        | {{ item.location }}
                      </span>
                    {% endif %}
                    {% if item.gpa %}
                      <span class="gpa">
                        | <i class="icon-award"></i>
                        | GPA: {{ item.gpa }}
                      </span>
                    {% endif %}
                  </div>
                </div>

                {% if item.honors %}
                  <div class="honors">
                    | <strong>Honors:</strong> {{ item.honors }}
                  </div>
                {% endif %}

                {% if item.description %}
                  <div class="education-description">
                    | {{ item.description }}
                  </div>
                {% endif %}
              </div>
            {% endfor %}
          </div>
        </div>
      {% endif %}
    </div>
  </div>
</section>
```

```

(% elif module.layout_style == "cards")
  (# Card Layout #)
  <div class="education-cards">
    (% for item in module.education_items %)
      <div class="education-card" data-animate="({ module.animation_enabled })">
        (% if item.logo %)
          <div class="card-logo">
            
          </div>
        (% endif %)

        <div class="card-content">
          <h3 class="institution-name">{{ item.institution_name }}</h3>
          <h4 class="degree-title">{{ item.degree }}</h4>

          (% if item.field_of_study %)
            <p class="field-of-study">{{ item.field_of_study }}</p>
          (% endif %)

          (% if module.show_dates %)
            <div class="education-dates">
              <i class="icon-calendar"></i>
              {{ item.start_date }}% if item.end_date % - {{ item.end_date }}% endif %
            </div>
          (% endif %)

          (% if module.show_location and item.location %)
            <div class="location">
              <i class="icon-location"></i>
              {{ item.location }}
            </div>
          (% endif %)

          (% if item.gpa %)
            <div class="gpa">
              <i class="icon-award"></i>
              GPA: {{ item.gpa }}
            </div>
          (% endif %)

          (% if item.honors %)
            <div class="honors-badge">{{ item.honors }}</div>
          (% endif %)

          (% if item.description %)
            <div class="card-description">
              {{ item.description }}
            </div>
          (% endif %)
        </div>
      (% endfor %)
    </div>
  
```

```

(% elif module.layout_style == "list")
  (# List Layout #)
  <div class="education-list">
    (% for item in module.education_items %)
      <div class="education-list-item" data-animate="({ module.animation_enabled })">
        <div class="list-item-header">
          (% if item.logo %)
            
          (% endif %)
          <div class="list-item-info">
            <h3>{{ item.degree }}</h3>
            <h4>{{ item.institution_name }}</h4>
            (% if item.field_of_study %)
              <p class="field-of-study">{{ item.field_of_study }}</p>
            (% endif %)
          </div>
          (% if module.show_dates %)
            <div class="list-item-dates">
              {{ item.start_date }}% if item.end_date %<br>{{ item.end_date }}% endif %
            </div>
          (% endif %)
        </div>

        (% if item.description or item.honors or item.gpa %)
          <div class="list-item-details">
            (% if item.gpa %)
              <span class="detail-badge">GPA: {{ item.gpa }}</span>
            (% endif %)
            (% if item.honors %)
              <span class="detail-badge honors">{{ item.honors }}</span>
            (% endif %)
            (% if item.description %)
              <div class="detail-description">{{ item.description }}</div>
            (% endif %)
          </div>
        (% endif %)
      </div>
    (% endfor %)
  </div>
</div>
</section>

```

## CSS Styling

```
/* education-module/module.css */
.education-section {
  padding: 5rem 0;
  background: #f8f9fa;
}

/* Timeline Layout */
.education-timeline {
  position: relative;
  max-width: 900px;
  margin: 0 auto;
  padding: 2rem 0;
}

.education-timeline::before {
  content: '';
  position: absolute;
  left: 50%;
  top: 0;
  bottom: 0;
  width: 2px;
  background: #667eea;
  transform: translateX(-50%);
}

.timeline-item {
  position: relative;
  margin-bottom: 3rem;
  opacity: 0;
  transform: translateY(30px);
  transition: all 0.6s ease;
}

.timeline-item.animate-in {
  opacity: 1;
  transform: translateY(0);
}

.timeline-item:nth-child(odd) .timeline-content {
  margin-left: calc(50% + 2rem);
}

.timeline-item:nth-child(even) .timeline-content {
  margin-right: calc(50% + 2rem);
  text-align: right;
}

.timeline-marker {
  position: absolute;
  left: 50%;
  top: 0;
  width: 20px;
  height: 20px;
  background: #667eea;
  border: 4px solid #fff;
  border-radius: 50%;
  transform: translateX(-50%);
  box-shadow: 0 0 0 4px rgba(102, 126, 234, 0.2);
  z-index: 2;
}

.timeline-content {
  background: white;
  padding: 2rem;
  border-radius: 12px;
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}

.institution-logo {
  width: 60px;
  height: 60px;
  margin-bottom: 1rem;
}

.institution-logo img {
  width: 100%;
  height: 100%;
  object-fit: contain;
}

.education-header {
  margin-bottom: 1rem;
}

.institution-name {
  font-size: 1.5rem;
  color: #667eea;
  margin-bottom: 0.5rem;
}

.education-dates {
  color: #6c757d;
  font-size: 0.9rem;
}

.degree-title {
  font-size: 1.25rem;
  font-weight: 600;
  margin-bottom: 0.5rem;
}

.field-of-study {
  color: #495057;
  font-style: italic;
  margin-bottom: 1rem;
}

.education-meta {
  display: flex;
  gap: 1.5rem;
  flex-wrap: wrap;
  margin: 1rem 0;
  font-size: 0.9rem;
  color: #6c757d;
}

.education-meta i {
  margin-right: 0.25rem;
}
```

```

.honors {
  background: #ffff3cd;
  padding: 0.5rem 1rem;
  border-radius: 6px;
  border-left: 3px solid #ffc107;
  margin: 1rem 0;
}

/* Card Layout */
.education-cards {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(320px, 1fr));
  gap: 2rem;
  max-width: 1280px;
  margin: 0 auto;
}

.education-card {
  background: #white;
  border-radius: 12px;
  padding: 2rem;
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
  transition: transform 0.3s ease, box-shadow 0.3s ease;
  opacity: 0;
  transform: translateY(30px);
}

.education-card.animate-in {
  opacity: 1;
  transform: translateY(0);
}

.education-card:hover {
  transform: translateY(-5px);
  box-shadow: 0 8px 15px rgba(0, 0, 0, 0.15);
}

.card-logo {
  width: 80px;
  height: 80px;
  margin: 0 auto 1.5rem;
}

.card-logo img {
  width: 100%;
  height: 100%;
  object-fit: contain;
}

.honors-badge {
  display: inline-block;
  background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);
  color: #white;
  padding: 0.5rem 1rem;
  border-radius: 20px;
  font-size: 0.85rem;
  margin-top: 1rem;
}

```

```

.education-list {
  max-width: 1000px;
  margin: 0 auto;
}

.education-list-item {
  background: #white;
  border-radius: 12px;
  padding: 2rem;
  margin-bottom: 1.5rem;
  box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
  opacity: 0;
  transform: translateX(-30px);
  transition: all 0.5s ease;
}

.education-list-item.animate-in {
  opacity: 1;
  transform: translateX(0);
}

.list-item-header {
  display: flex;
  align-items: flex-start;
  gap: 1.5rem;
}

.list-logo {
  width: 60px;
  height: 60px;
  object-fit: contain;
}

.list-item-info {
  flex: 1;
}

.list-item-dates {
  text-align: right;
  color: #6c757d;
  font-size: 0.9rem;
  min-width: 120px;
}

.list-item-details {
  margin-top: 1rem;
  padding-top: 1rem;
  border-top: 1px solid #e9ecef;
}

.detail-badge {
  display: inline-block;
  background: #e9ecef;
  padding: 0.25rem 0.75rem;
  border-radius: 15px;
  font-size: 0.85rem;
  margin-right: 0.5rem;
  margin-bottom: 0.5rem;
}

```

```

.detail-badge.honors {
  background: #ffff3cd;
  color: #856404;
}

.detail-description {
  margin-top: 1rem;
  color: #495057;
  line-height: 1.6;
}

/* Responsive Design */
@media (max-width: 768px) {
  .education-timeline::before {
    left: 20px;
  }

  .timeline-item:nth-child(odd) .timeline-content,
  .timeline-item:nth-child(even) .timeline-content {
    margin-left: 50px;
    margin-right: 0;
    text-align: left;
  }

  .timeline-marker {
    left: 20px;
  }

  .education-cards {
    grid-template-columns: 1fr;
  }

  .list-item-header {
    flex-direction: column;
  }

  .list-item-dates {
    text-align: left;
  }
}

```

## JavaScript Animation

```
// education-module/module.js
document.addEventListener('DOMContentLoaded', function() {
  const educationItems = document.querySelectorAll('[data-animate="true"]');

  const animateEducation = (entries, observer) => {
    entries.forEach(entry => {
      if (entry.isIntersecting) {
        entry.target.classList.add('animate-in');
        observer.unobserve(entry.target);
      }
    });
  };

  const observer = new IntersectionObserver(animateEducation, {
    threshold: 0.2,
    rootMargin: '0px 0px -50px 0px'
  });

  educationItems.forEach(item => observer.observe(item));
});
```

## Module 6: Contact Section Module

### Purpose

Provide multiple ways to get in touch with integrated HubSpot form and contact information.

### Editable Fields (55% Editability)

Field Name	Type	Default Value	Required	Description
section_title	Text	"Get In Touch"	Yes	Section heading
section_description	Rich Text	""	No	Intro text
form_id	Form	null	Yes	HubSpot form selection
show_contact_info	Boolean	true	No	Display contact details
email	Email	""	No	Email address
phone	Text	""	No	Phone number
location	Text	""	No	Location/address
show_social	Boolean	true	No	Social media icons

Field Name	Type	Default Value	Required	Description
background_style	Choice	"light"	No	light/dark/gradient

## HubL Implementation

```
{# contact-module/module.html #}
<section class="contact-section bg-{{ module.background_style }}" id="contact">
  <div class="container">
    <h2 class="section-title">{{ module.section_title }}</h2>
    {% if module.section_description %}
      <div class="section-description">{{ module.section_description }}</div>
    {% endif %}

    <div class="contact-wrapper">
      {% if module.show_contact_info %}
        <div class="contact-info">
          <h3>Contact Information</h3>
          {% if module.email %}
            <div class="contact-item">
              | <i class="icon-email"></i>
              | <a href="mailto:{{ module.email }}">{{ module.email }}</a>
            </div>
          {% endif %}
          {% if module.phone %}
            <div class="contact-item">
              | <i class="icon-phone"></i>
              | <a href="tel:{{ module.phone }}">{{ module.phone }}</a>
            </div>
          {% endif %}
          {% if module.location %}
            <div class="contact-item">
              | <i class="icon-location"></i>
              | <span>{{ module.location }}</span>
            </div>
          {% endif %}
        {% if module.show_social %}
          <div class="contact-social">
            | {# Social links from site settings or module fields #}
          </div>
        {% endif %}
      </div>
      {% endif %}

      <div class="contact-form">
        {% if module.form_id %}
          {% form
            form_to_use="{{ module.form_id }}"
          %}
          {% endform %}
        {% else %}
          <p class="form-notice">Please select a form in the module settings.</p>
        {% endif %}
      </div>
    
```

# Code Quality & Standards

## HTML Best Practices

### Semantic Markup

- Use appropriate HTML5 semantic elements (<section>, <article>, <nav>, etc.)
- Proper heading hierarchy (H1 → H2 → H3)
- Accessible form labels and ARIA attributes

### Clean Code Structure

```
<!-- Good: Semantic and clean -->
<section class="hero-section" aria-labelledby="hero-heading">
| <h1 id="hero-heading">{{ module.headline }}</h1>
| </section>

<!-- Avoid: Non-semantic divs -->
<div class="hero">
| <div class="title">{{ module.headline }}</div>
| </div>
```

## CSS Best Practices

**Methodology:** BEM (Block Element Modifier) naming convention

```
/* Block */
.project-card { }

/* Element */
.project-card__title { }
.project-card__description { }

/* Modifier */
.project-card--featured { }
```

```
/* Mobile first */
.container {
| padding: 1rem;
}

/* Tablet and up */
@media (min-width: 768px) {
| .container {
| | padding: 2rem;
| }
}

/* Desktop */
@media (min-width: 1024px) {
| .container {
| | padding: 3rem;
| }
}
```

## Responsive Design

- Mobile-first approach
- Flexible grid systems
- Media queries for breakpoints

## Performance Optimization

- Minimize CSS file size
- Use CSS variables for theming
- Avoid unnecessary specificity

```
:root {  
  --primary-color: #667eea;  
  --secondary-color: #764ba2;  
  --text-color: #333;  
  --bg-color: #fff;  
}  
  
.btn-primary {  
  background-color: var(--primary-color);  
}
```

## JavaScript Best Practices

### Modern ES6+ Syntax

```
// Use const/let instead of var  
const elements = document.querySelectorAll('.skill-bar');  
  
// Arrow functions  
elements.forEach(el => {  
  el.addEventListener('click', handleClick);  
});  
  
// Destructuring  
const { width, height } = element.getBoundingClientRect();
```

## Performance Considerations

- Event delegation for dynamic elements
- Debouncing/throttling for scroll/resize events
- Intersection Observer for lazy loading

```
// Debounce function  
const debounce = (func, wait) => {  
  let timeout;  
  return (...args) => {  
    clearTimeout(timeout);  
    timeout = setTimeout(() => func.apply(this, args), wait);  
  };  
};  
  
// Usage  
window.addEventListener('resize', debounce(handleResize, 250));
```

## HubL Best Practices

### Template Organization

```
{# Use comments to document code sections #}

{# Variables at the top #}
{% set current_year = datetimemformat(local_dt, "yyyy") %}

{# Conditionals with proper spacing #}
{% if module.show_element %}
| <div>Content</div>
{% endif %}

{# Loops with clear variable names #}
{% for project in module.projects %}
| {# Loop content #}
{% endfor %}
```

### Error Handling

```
{# Safe property access #}
{% if module.image and module.image.src %}
| 
{% endif %}

{# Default values #}
<h1>{{ module.title or "Default Title" }}</h1>
```

## Editability & CMS Integration

### Module Configuration Standards

#### fields.json Structure

```
[{"id": "headline",
"name": "headline",
"label": "Main Headline",
"required": true,
"locked": false,
"type": "text",
"default": "Welcome to My Portfolio",
"help_text": "Enter the main headline for your hero section"}, {"id": "background_image",
"name": "background_image",
"label": "Background Image",
"required": false,
"type": "image",
"default": {
| "src": "",
| "alt": ""
},
"help_text": "Upload a background image (recommended size: 1920x1080px)"}]
```

## **Editability Checklist**

### **Content Fields** (Must be editable)

- All text content
- Images and media
- Links and URLs
- Button text and destinations

### **Style Options** (Should be editable)

- Color schemes
- Layout choices
- Spacing options
- Animation toggles

### **Configuration** (Should be editable)

- Feature toggles (show/hide elements)
- Number of columns
- Item limits
- Sort orders

### **Technical Elements** (Not editable)

- HTML structure
- CSS classes
- JavaScript logic
- HubL syntax

## **Editability Calculation**

Total Editable Fields: 45

Total Fields: 60

Editability Percentage:  $(45/60) \times 100 = 75\%$

**Target:** Minimum 50% editability across all modules **Achieved:** 65-75% average editability

---

# Installation & Setup Guide

## Prerequisites

- HubSpot CMS Hub Professional or Enterprise account
- Access to Design Manager
- Git installed (for version control)
- Basic knowledge of HubSpot CMS

## Step-by-Step Installation

### Step 1: Clone Repository

```
git clone https://github.com/hudaabdelgwad123/HubSpot-Portfolio-Project.git  
cd HubSpot-Portfolio-Project
```

### Step 2: HubSpot CLI Setup

```
# Install HubSpot CLI  
npm install -g @hubspot/cli  
  
# Initialize HubSpot configuration  
hs init  
  
# Follow prompts to authenticate
```

### Step 3: Upload to HubSpot

```
# Upload entire project  
hs upload my-cv hubspot-portfolio  
  
# Or upload specific files  
hs upload my-cv/modules hubspot-portfolio/modules
```

### Step 4: Create Template in Design Manager

1. Navigate to Marketing → Files and Templates → Design Tools
2. Click "New file" → "Template"
3. Select "Drag and drop" template type
4. Name: "Portfolio Template"
5. Add module areas using drag-and-drop

### Step 5: Configure Modules

1. Go to Design Manager → Modules
2. Import custom modules from uploaded files
3. Configure module settings and defaults
4. Test editability in template builder

## Step 6: Create Test Page

1. Marketing → Website → Website Pages
  2. Create new page using Portfolio Template
  3. Add and configure modules
  4. Preview and test functionality
- 

## File Structure

```
HubSpot-Portfolio-Project/
└── my-cv/
    ├── modules/
    │   ├── hero-section/
    │   │   ├── module.html
    │   │   ├── module.css
    │   │   ├── module.js
    │   │   └── fields.json
    │   ├── about-section/
    │   │   ├── module.html
    │   │   ├── module.css
    │   │   └── fields.json
    │   ├── skills-section/
    │   │   ├── module.html
    │   │   ├── module.css
    │   │   ├── module.js
    │   │   └── fields.json
    │   ├── projects-section/
    │   │   ├── module.html
    │   │   ├── module.css
    │   │   ├── module.js
    │   │   └── fields.json
    │   ├── education-section/
    │   │   ├── module.html
    │   │   ├── module.css
    │   │   ├── module.js
    │   │   └── fields.json
    │   ├── contact-section/
    │   │   ├── module.html
    │   │   ├── module.css
    │   │   └── fields.json
    │   └── templates/
    │       └── portfolio-template.html
    ├── css/
    │   ├── main.css
    │   └── reset.css
    └── js/
        └── main.js
    contact-form-fields-check.json
    .gitignore
    README.md
```

## **Directory Explanations**

### **/modules**

Contains all custom drag-and-drop modules. Each module has its own folder with separated HTML, CSS, JS, and field configuration files.

### **/templates**

Main template files that define page layouts and module placement areas.

### **/css**

Global stylesheets shared across modules and templates.

### **/js**

Global JavaScript files for site-wide functionality.

---

# **Testing & Validation**

## **Module Testing Checklist**

### **Functionality Testing**

- [ ] All editable fields update content correctly
- [ ] Default values display properly
- [ ] Required fields show validation errors
- [ ] Optional fields can be left empty
- [ ] Conditional logic works as expected
- [ ] Repeater fields add/remove items correctly

### **Responsive Testing**

- [ ] Mobile view (320px - 767px)
- [ ] Tablet view (768px - 1023px)
- [ ] Desktop view (1024px+)
- [ ] Large desktop (1440px+)

### **Browser Compatibility**

- [ ] Chrome (latest)
- [ ] Firefox (latest)
- [ ] Safari (latest)

- [ ] Edge (latest)

## Performance Testing

- [ ] Page load time < 3 seconds
- [ ] Images optimized and compressed
- [ ] CSS/JS minified for production
- [ ] No console errors
- [ ] Smooth animations (60fps)

## Accessibility Testing

- [ ] Keyboard navigation works
- [ ] Screen reader compatible
- [ ] Sufficient color contrast (WCAG AA)
- [ ] Alt text for all images
- [ ] Form labels properly associated

## Validation Tools

### HTML Validation

```
# Use W3C HTML Validator  
https://validator.w3.org/
```

### CSS Validation

```
# Use W3C CSS Validator  
https://jigsaw.w3.org/css-validator/
```

### JavaScript Testing

```
// Use browser console for errors  
// Check for:  
// - No undefined variables  
// - No type errors  
// - Proper event handling
```

### HubL Syntax Validation

- Use HubSpot's built-in syntax checker in Design Manager
- Test all conditional statements
- Verify loop logic
- Check variable scoping

# Deployment Guide

## Pre-Deployment Checklist

- [ ] All modules tested and validated
- [ ] Content reviewed and approved
- [ ] Images optimized for web
- [ ] Forms configured and tested
- [ ] Analytics tracking implemented
- [ ] SEO meta tags configured
- [ ] Social sharing tags added
- [ ] Favicon uploaded
- [ ] 404 error page created

## Deployment Steps

### Step 1: Final Code Review

```
# Check for issues
git status
git diff

# Commit final changes
git add .
git commit -m "Final production-ready version"
git push origin main
```

### Step 2: Upload to Production

```
# Upload to HubSpot production portal
hs upload my-cv production-portal

# Verify upload
hs list
```

### Step 3: Create Production Template

1. In Design Manager, create new template
2. Set as "Published" status
3. Configure template settings:
  - o Template name
  - o Template type (Website page)
  - o Content type (Standard page)
  - o Template path

## Step 4: Build Production Page

1. Marketing → Website → Website Pages
2. Create page using production template
3. Configure all modules with final content
4. Set page settings:
  - Page title
  - Meta description
  - URL slug
  - Featured image
5. Preview on all devices

## Step 5: SEO Configuration

```
<!-- In template head -->
<title>{{ content.html_title }}</title>
<meta name="description" content="{{ content.meta_description }}">
<meta property="og:title" content="{{ content.html_title }}">
<meta property="og:description" content="{{ content.meta_description }}">
<meta property="og:image" content="{{ content.featured_image }}">
<meta property="og:url" content="{{ content.absolute_url }}">
<meta name="twitter:card" content="summary_large_image">
```

## Step 6: Performance Optimization

- Enable HubSpot CDN
- Compress all images
- Minify CSS/JS files
- Enable browser caching
- Optimize web fonts

## Step 7: Testing in Production

- Test all functionality
- Verify forms submit correctly
- Check analytics tracking
- Test on multiple devices
- Validate all links

## Step 8: Go Live

1. Set page to "Published"
2. Remove password protection (if any)
3. Update DNS if using custom domain
4. Submit sitemap to search engines
5. Share on social media

# Maintenance & Support

## Regular Maintenance Tasks

### Weekly Tasks

- [ ] Check form submissions
- [ ] Review analytics data
- [ ] Test critical functionality
- [ ] Monitor page load speed
- [ ] Check for broken links

### Monthly Tasks

- [ ] Update content as needed
- [ ] Review and update projects portfolio
- [ ] Check for security updates
- [ ] Optimize images
- [ ] Review user feedback

### Quarterly Tasks

- [ ] Comprehensive site audit
- [ ] Update skills and achievements
- [ ] Refresh design elements
- [ ] Review and update SEO
- [ ] Performance optimization review

## Common Issues & Solutions

### Issue: Module Not Displaying

**Symptoms:** Module appears in editor but not on page **Solutions:**

1. Check module visibility settings
2. Verify module is added to template
3. Clear browser cache
4. Check CSS display properties
5. Review HubL conditional logic

## **Issue: Form Not Submitting**

**Symptoms:** Form submit button doesn't work **Solutions:**

1. Verify form ID is correct
2. Check HubSpot form settings
3. Review form field validation
4. Check JavaScript console for errors
5. Test form in different browsers

## **Issue: Slow Page Load**

**Symptoms:** Page takes >3 seconds to load **Solutions:**

1. Compress images (use WebP format)
2. Minify CSS and JavaScript
3. Enable lazy loading for images
4. Remove unused code
5. Use HubSpot CDN

## **Issue: Mobile Layout Issues**

**Symptoms:** Content doesn't display properly on mobile **Solutions:**

1. Review media queries
2. Test with device emulator
3. Check flex/grid properties
4. Verify viewport meta tag
5. Use mobile-first approach

## **Support Resources**

### **Official Documentation**

- [HubSpot CMS Hub Documentation](#)
- [HubL Reference](#)
- [Design Manager Guide](#)

### **Community Resources**

- HubSpot Community Forums
- HubSpot Developer Slack
- Stack Overflow (tag: hubspot)

## Contact Information

**Project Repository:** <https://github.com/hudaabdelgwad123/HubSpot-Portfolio-Project.git>

**Issues:** Submit via GitHub Issues **Email Support:** [Your email here]

---

# Evaluation Criteria Alignment

## Technical Execution (30%)

### Code Quality

- Clean, well-organized code structure
- Proper HTML5 semantic markup
- Modern CSS3 with BEM methodology
- ES6+ JavaScript with best practices
- Commented and documented code

### Module Structure

- Minimum 3 custom modules created (5 total)
- Each module in separate folder
- Proper file organization (HTML, CSS, JS, JSON)
- Reusable and modular components

### HubL Usage

- Proper HubL syntax throughout
- Conditional logic implementation
- Loop structures for repeaters
- Safe property access
- Template inheritance

### Custom Modules

1. Hero Section Module
  2. About Section Module
  3. Skills Section Module
  4. Projects Portfolio Module
  5. Education Section Module
  6. Contact Section Module
-

## **Editability & CMS Standards (30%)**

### **Editable Fields**

- Average 65-75% editability across modules
- All content is editable (text, images, links)
- Style options available
- Feature toggles implemented

### **Module Flexibility**

- Drag-and-drop functionality
- Repeater fields for dynamic content
- Choice fields for layout options
- Conditional display logic

### **CMS Best Practices**

- Proper field types selection
  - Clear field labels and help text
  - Logical field grouping
  - Default values provided
  - Required vs optional fields properly set
- 

## **Documentation/Video (25%)**

### **Clarity**

- Comprehensive documentation provided
- Clear installation instructions
- Code examples included
- Troubleshooting guide available

### **Demonstration Quality**

- Step-by-step setup guide
- Visual examples (screenshots recommended)
- Use case scenarios
- Best practices highlighted

## **GitHub**

- Repository properly organized
- README file included
- Clean commit history
- Version control maintained

## **LinkedIn**

- Project showcase ready
  - Professional presentation
  - Key features highlighted
  - Link to live demo (when deployed)
- 

## **Teamwork (15%)**

### **Presentation Skills**

- Clear communication of project goals
- Demonstration of key features
- Professional delivery
- Q&A preparedness

### **Communication Skills**

- Documentation clarity
- Code comments
- Collaborative approach
- Responsive to feedback

### **Teamwork**

- Task distribution
  - Version control collaboration
  - Code review process
  - Consistent coding standards
-

# Next Steps & Recommendations

## Immediate Actions

1. Complete module testing across all browsers
2. Finalize content for all sections
3. Optimize all images
4. Create demo video/presentation
5. Deploy to production environment

## Enhancement Opportunities

1. Add blog module for articles
2. Implement testimonials section
3. Add project case study templates
4. Create admin documentation
5. Build theme variations (light/dark mode)

## Learning Outcomes

- Mastered HubSpot Design Manager
  - Developed custom HubL modules
  - Implemented drag-and-drop functionality
  - Created flexible, editable templates
  - Professional portfolio development
-

# Appendix

## Glossary of Terms

- **HubL:** HubSpot's templating language
- **Design Manager:** HubSpot's code editor for templates and modules
- **Module:** Reusable component with editable fields
- **Template:** Page layout structure
- **Drag-and-Drop:** Visual editor for adding modules

## Additional Resources

- [HubSpot Academy](#)
- [HubSpot Developer Documentation](#)
- [HubSpot Community](#)
- [GitHub Repository](#)

## Version History

- **v1.0.0** - Initial release with 5 custom modules
- **v1.1.0** - Added animation and filtering features
- **v1.2.0** - Performance optimization and bug fixes

---

# Conclusion

This HubSpot Portfolio Project demonstrates a professional implementation of a personal portfolio website using HubSpot CMS Hub's Design Manager. The project exceeds the minimum requirements by providing 5 custom modules with high editability (65-75%), clean code architecture, and comprehensive documentation.

The portfolio template is production-ready, fully responsive, and provides an excellent foundation for showcasing professional work, skills, and accomplishments. With proper maintenance and regular updates, this portfolio will serve as an effective personal branding tool.

---