

Website Requirements

for the Department of Computer Science

1. Purpose & Audience

- **Purpose:** Provide prospective students, faculty, and visitors with clear information about programs, research, faculty, events, and contacts.
- **Primary Audiences:**
 - Prospective undergraduate and graduate students
 - Current students and faculty
 - Alumni and industry partners
 - General public seeking department news and resources

2. Functional Requirements

1. Home Page

- Hero slideshow of campus and research highlights (HTML5/CSS3/JavaScript)
- Quick links to Programs, Faculty, News, and Contact

2. About Page

- Overview of mission, history, and accreditation
- Hero banner image and two-column text layout

3. Programs Section

- **Undergraduate Programs:** Card grid listing majors, links to detailed pages

- **Graduate Programs:** Card grid for Master's and PhD tracks

4. **Faculty Page**

- Responsive photo grid of faculty with names, titles, and short bios

5. **News & Events**

- Card-based layout for latest announcements, conferences, and seminars
- Integration of RSS feed or departmental blog

6. **Contact Page**

- Custom contact form (HTML5 form validation)
- Embedded Google Form for feedback/surveys
- Interactive Google Map embed
- Social media icons linking to Facebook, Twitter, Instagram

7. **Multimedia Integration**

- `<video>` element with department introduction
- CSS3 animations for section reveals on scroll
- Lightbox gallery for photo collections

8. **Third-Party Services**

- Embedded Google Docs (syllabi, research PDFs)
- YouTube video embeds for lectures and showcases
- Social media widgets (Twitter timeline, Facebook page plugin)

9. **Limited Updating**

- Content updates via Google Docs embed or by editing structured HTML snippets
- News feed automatically refreshes through RSS or blog widget

3. Non-Functional Requirements

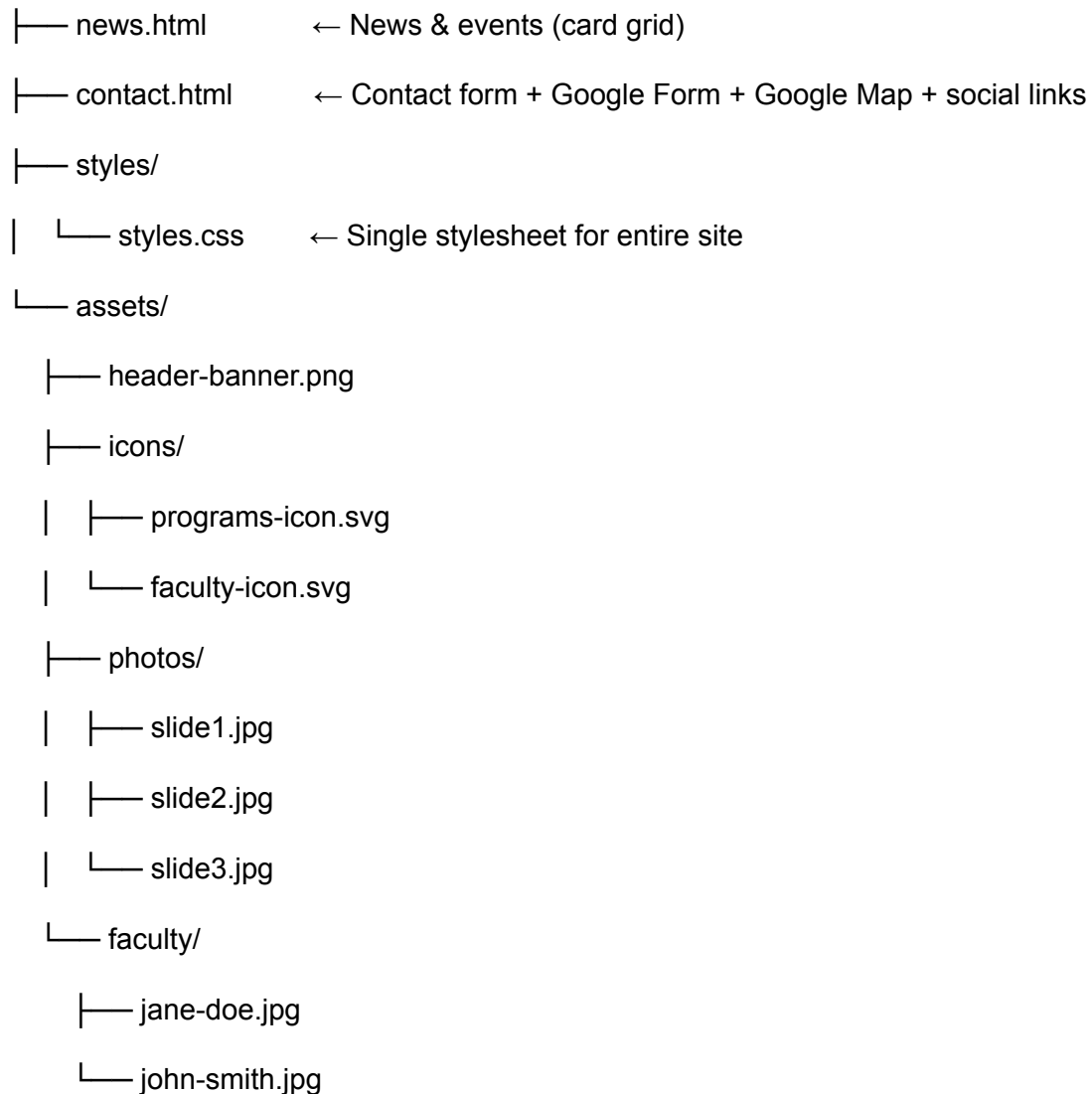
- **Responsive Design:** Mobile-first, adapts to all screen sizes using CSS Grid/Flexbox and media queries.
- **Cross-Browser Compatibility:** Support latest versions of Chrome, Firefox, Safari, and Edge.
- **Accessibility:** WCAG 2.1 AA compliance—semantic HTML, ARIA attributes, keyboard navigable.
- **Performance:** Optimized images, minified CSS/JS, lazy loading of media.
- **Maintainability:** Single stylesheet (`styles/styles.css`), modular JavaScript, clear directory structure.
- **SEO & Analytics:** Clean URLs, meta tags, embedded Google Analytics snippet.
- **Security:** HTTPS required, form data sanitized, no inline JavaScript for content.

Site Map & File Structure for Department Website

Tip: It's highly recommended to accompany this text-based structure with a visual sitemap diagram (e.g., a flowchart made in draw.io, Lucidchart, or similar). The diagram provides a clear, at-a-glance overview of how pages interconnect and helps communicate your navigation flow more effectively.

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```
|— index.html      ← Home + CSS slideshow
|— about.html     ← About + hero banner + two-col
|— programs/
|   |— undergrad.html ← Undergrad programs (cards)
|   |— grad.html     ← Graduate programs (cards)
|— faculty.html   ← Faculty photo grid
```



URL & Navigation Flow

1. **Home** (</index.html>) → highlights & quick-link navigation.
2. **About** (</about.html>) → department mission & history.
3. **Programs** (</programs/undergrad.html>, </programs/grad.html>) → academic offerings.
4. **Faculty** (</faculty.html>) → profiles & bios.
5. **News & Events** (</news.html>) → announcements & feeds.

6. **Contact** (</contact.html>) → feedback form, map, social links.

All navigation links use root-relative paths (e.g., </programs/undergrad.html>) to ensure consistency across environments. Each page includes the same header/navigation bar and footer for a unified user experience.