



**Department of Computer
Science**
Quaid-e-Azam University, Islamabad

ASSIGNMETN 1

CS, QAU WEBSITE

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Submitted to:
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Objective:

The purpose of this project is to redesign the website for the Computer Science division of [cs.qau.edu.pk] (<https://cs.qau.edu.pk>) to improve visual appeal, ease of use and responsiveness across all screen sizes with a mobile approach. The redesign includes the latest layouts, consistent color schemes, and userfriendly navigation. HTML5 and CSS3 technologies are used to ensure accessibility, performane and responsiveness. The final design is intended to provide better user experie nce, while simultaneously reflecting the academic excellence of the faculty.

Tools & Technologies:

- Html
- CSS
- Tailwind CSS

Folders & Files:

Name	Content
Index.html	Header, latest news, introduction, footer
Academics.html	Header, courses(PhD, MS_DS, MPhil, MS_IT, BS), footer
Research.html	Header, research groups, footer
Funded_projects.html	Header, funded projects of faculty, footer
Admission.html	Header, courses(PhD, MS_DS, MPhil, MS_IT, BS), footer
Faculty.html	Header, information about faculty, footer
Contact_us.html	Header, location, footer
Phd_cs.html	Header, about, admission requirements, research groups, courses, FAQs, footer
Mphil_cs.html	Header, about, admission requirements, program structure, courses, FAQs(questions & answers), footer
Ms_ds.html	Header, about, admission requirements, program structure, courses, footer
Ms_it.html	Header, about, admission requirements, program structure, courses, conferences, journals, footer
Bs_cs.html	Header, about, admission requirements, program structure, courses, footer
Style.css	Used to design html pages with CSS styling
Img folder	Consist of images & pdf

Header Code Review:

This header code will be same in all html pages.

```
<!-- Navbar -->
<header class="md:sticky top-0 z-30 font-bold bg-[url('img/background_image.avif')] bg-cover shadow-md col-span-full">
  <ul class="flex flex-col md:flex-row gap-4 md:gap-6 justify-center items-center py-4 bg-opacity-90 backdrop-blur-sm">
    <a class="w-12 h-12" href="#"></a>
    <li><a href="index.html">Home</a></li>
    <li><a href="academics.html">Academics</a></li>
    <li><a href="research.html">Research</a></li>
    <li><a href="funded_projects.html">Funded Projects</a></li>
    <li><a href="admissions.html">Admissions</a></li>
    <li><a href="faculty.html">Faculty</a></li>
    <li><a href="contact_us.html">Contact Us</a></li>
  </ul>
</header>
```

CSS Property	Purpose
md:sticky	Makes the header stay at the top when scrolling (only on medium+ screens).
top-0	Positions the sticky header at the very top of the page.
z-30	Puts the header above other content (layering).
font-bold	Makes all text bold for better visibility.
bg-[url('img/background_image.avif')]	Adds a background image to make the header look nice.
bg-cover	Makes the background image fully cover the header area.
shadow-md	Adds a medium shadow for a 3D or lifted look.
col-span-full	Makes the header span across all columns in a grid layout.
flex	Uses Flexbox to arrange items in a line.
flex-col	Puts items in a vertical stack on small screens.
md:flex-row	Puts items in a horizontal line on medium and larger screens.
gap-4 / md:gap-6	Adds spacing between items (small gap on mobile, larger on desktop).

justify-center	Horizontally centers the menu items.
items-center	Vertically centers items in the header.
py-4	Adds top and bottom padding to increase header height.
bg-opacity-90	Makes the background slightly transparent (90% solid).
backdrop-blur-sm	Adds a soft blur behind the header — modern and stylish effect.
w-12 h-12	Sets width and height for the logo (square shape).
object-contain	Keeps the full logo image visible inside its box (no cut-off).

Footer Code Review:

This footer code will be same in all html pages.

```
<!-- Footer -->
<footer class="col-span-full bg-[url(img/background_links.jpg)] bg-cover text-white p-4 mt-4 shadow-md">
  <div class="grid grid-cols-1 sm:grid-cols-3 gap-6 text-sm text-center sm:text-left">

    <ul class="space-y-1">
      <li class="mb-2 font-bold">Programs</li>
      <li><a href="phd_cs.html">PHD (Computer Science)</a></li>
      <li><a href="ms_it.html">MS (Information Technology)</a></li>
      <li><a href="mphil_cs.html">MPhil (Computer Science)</a></li>
      <li><a href="ms_ds.html">MS (Data Science)</a></li>
      <li><a href="bs_cs.html">BS (Computer Science)</a></li>
    </ul>

    <ul class="space-y-1">
      <li class="mb-2 font-bold">Help</li>
      <li>Quaid-i-Azam University, <br />Islamabad, 45320, Pakistan</li>
      <li class="flex justify-center sm:justify-start items-center"><a href="mailto:cs@qau.edu.pk">cs@qau.edu.pk</a></li>
      <li class="flex justify-center sm:justify-start items-center"><a href="tel:+9205190642057">+92 (051) 9064 2057</a></li>
    </ul>

    <ul class="space-y-1">
      <li class="mb-2 font-bold">Resources</li>
      <li class="flex justify-center sm:justify-start items-center"><a href="https://whatsapp.com/channel/0029ValNFwChq6Gml7mDL3B" target="_blank">WhatsApp</a></li>
      <li class="flex justify-center sm:justify-start items-center"><a href="https://www.instagram.com/qauislamabadpk" target="_blank">Instagram</a></li>
      <li class="flex justify-center sm:justify-start items-center"><a href="https://www.facebook.com/qau.edu.pk" target="_blank">Facebook</a></li>
      <li class="flex justify-center sm:justify-start items-center"><a href="https://www.youtube.com/@QAU_Islamabad" target="_blank">YouTube</a></li>
    </ul>
  </div>

  <p class="text-center text-xs mt-6">2025 © Department of Computer Sciences, QAU, Islamabad</p>
</footer>
```

CSS Property	Purpose
col-span-full	Makes the footer span across the full width of the grid layout.
bg-[url(img/background_links.jpg)]	Sets a background image for the footer.

bg-cover	Ensures the background image covers the whole footer area.
text-white	Changes all text color to white for better contrast on dark background.
p-4	Adds padding (space inside) all around the footer.
mt-4	Adds space (margin) above the footer to separate it from content above.
shadow-md	Adds a medium shadow to give a 3D look or raised effect.
grid	Applies CSS Grid layout to arrange child elements in a grid.
grid-cols-1 sm:grid-cols-3	One column on small screens; three columns on medium screens and larger.
gap-6	Adds space between grid columns.
text-sm	Sets smaller text size for footer content.
text-center sm:text-left	Centers text on small screens, aligns it left on medium+ screens.
space-y-1	Adds vertical space between each list item.
mb-2	Adds bottom margin to section headings (like “Programs”).
font-bold	Makes the section headings bold.
flex	Uses Flexbox for layout of items inside a row (e.g., logo + text).
justify-center sm:justify-start	Centers items on small screens, aligns to start (left) on larger screens.
items-center	Vertically aligns items in the middle.
w-5	Sets image (icon) width to a small size (5 = 1.25rem).
mr-1	Adds a small space (margin) to the right of icons before the text.
text-xs	Makes the copyright text very small.
mt-6	Adds space above the bottom copyright line.

Style Sheet Review:

```
body {  
  text-transform: capitalize;  
  margin: 0;  
  padding: 0;  
}  
  
ul li a:hover {  
  color: blue;  
  text-decoration: underline;  
}  
  
header li a:hover {  
  color: white;  
  text-decoration: none;  
}  
  
header ul li {  
  padding: 8px;  
  border-radius: 4px;  
  color: white;  
  background-image: linear-gradient(to right, rgb(255, 2, 196), rgb(21, 5, 255));  
  background-size: 0% 100%;  
  background-repeat: no-repeat;  
  background-position: left;  
  transition: all 0.3s ease;  
}  
  
header ul li:hover {  
  background-size: 100% 100%;  
}  
  
.funded-ul {  
  height: 400px;  
  width: 300px;  
  background-color: rgb(172, 172, 103);  
  box-shadow: 2px 2px 4px black;  
  border-radius: 5px;  
  transition: transform 0.5s ease-in;  
}
```

CSS Property	Purpose
body { text-transform: capitalize; }	Makes the first letter of each word on the page a capital letter.
body { margin: 0; padding: 0; }	Removes default spacing around the whole page.
ul li a:hover	When you hover over a link inside a list, the link becomes blue and underlined.

header li a:hover	When hovering over a header link, it becomes white and removes the underline.
header ul li	Styles each list item in the header: adds padding, rounded corners, and a gradient background.
background-image: linear-gradient(...)	Creates a left-to-right color fade from pink to blue inside the header item.
background-size: 0% 100%	Hides the gradient by default (width = 0%).
transition: all 0.3s ease;	Smoothly animates changes over 0.3 seconds.
header ul li:hover	On hover, the background grows to full size (showing the gradient).
.funded-ul	Styles the funded projects box: sets size, background color, shadow, and rounded corners.
box-shadow: 2px 2px 4px 2px black;	Adds a shadow around the box to make it look lifted.
transition: transform 0.5s ease-in;	Animates any future transform effects smoothly when applied (like scale or move).

