TY. B. Tech. (Sem-II)

CS3215 : Web Technology

Assignment No: 6- Develop a website using toggle able or dynamic tabs or pills with bootstrap and JQuery

Roll. No.	Gr. No.	Div	Batch	Name
62	12120238	D	1	Tanaya Naik

Experiment Number: 06

Theory:

Bootstrap Tabs and Pills

Menus
Most web pages have some kind of a menu.

In HTML, a menu is often defined in an unordered list <ul> (and styled afterwards), like this:

```
<ul>
  <li><a href="#">Home</a></li>
  <li><a href="#">Menu 1</a></li>
  <li><a href="#">Menu 2</a></li>
  <li><a href="#">Menu 3</a></li>
</ul>
```

If you want to create a horizontal menu of the list above, add the .list-inline class to <ul>:

```
<ul class="list-inline">
abs
Home
Menu 1
Menu 2
Menu 3
```

Tabs are created with <ul class="nav nav-tabs">:

Tip: Also mark the current page with <li class="active">.

The following example creates navigation tabs:

Example

```
<ul class="nav nav-tabs">
  <li class="active"><a href="#">Home</a></li>
  <li><a href="#">Menu 1</a></li>
  <li><a href="#">Menu 2</a></li>
  <li><a href="#">Menu 3</a></li>
</ul>
```

Tabs With Dropdown Menu

Home
Menu 1
Menu 2
Menu 3
Tabs can also hold dropdown menus.

The following example adds a dropdown menu to "Menu 1":

Example

```
<ul class="nav nav-tabs">
  <li class="active"><a href="#">Home</a></li>
  <li class="dropdown">
    <a class="dropdown-toggle" data-toggle="dropdown" href="#">Menu 1
    <span class="caret"></span></a>
    <ul class="dropdown-menu">
      <li><a href="#">Submenu 1-1</a></li>
      <li><a href="#">Submenu 1-2</a></li>
      <li><a href="#">Submenu 1-3</a></li>
    </ul>
  </li>
  <li><a href="#">Menu 2</a></li>
  <li><a href="#">Menu 3</a></li>
</ul>
```

Pills

Home
Menu 1
Menu 2
Menu 3
Pills are created with <ul class="nav nav-pills">. Also mark the current page with <li class="active">:

Example

```
<ul class="nav nav-pills">
  <li class="active"><a href="#">Home</a></li>
  <li><a href="#">Menu 1</a></li>
  <li><a href="#">Menu 2</a></li>
  <li><a href="#">Menu 3</a></li>
</ul>
```

Code:

Pills.html

```
<!DOCTYPE html>

<head>
   <link rel="stylesheet" type="text/css" href="pills.css">

   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">

   <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"></script>

   <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"></script>
   <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script>
</head>

<body>
   <div class="wrapper">
   <div class="video-background">
      <video autoplay muted loop poster="video.mp4" id="bgvid">
         <source src="video.mp4" type="video/mp4">
      </video>
      <div class="video-overlay"></div>
      <div class="video-content">
         <div class="container">
            <div class="row">
               <div class="col-md-6 offset-md-3">
                  <div class="tab-wrapper">
                     <ul class="nav nav-pills mb-3" id="pills-tab" role="tablist">
                        <li class="nav-item">
                           <a class="nav-link active" id="pills-home-tab" data-toggle="pill" href="#pills-home"
                              role="tab" aria-controls="pills-home" aria-selected="true">HOME</a>
                        </li>
                        <li class="nav-item">
                           <a class="nav-link" id="pills-profile-tab" data-toggle="pill" href="#pills-profile"
                              role="tab" aria-controls="pills-profile"
                              aria-selected="false">CLOUD_COMPUTING</a>
                        </li>
                        <li class="nav-item">
                           <a class="nav-link" id="pills-contact-tab" data-toggle="pill" href="#pills-contact"
                              role="tab" aria-controls="pills-contact"
                              aria-selected="false">WEB_TECHNOLOGY</a>
                        </li>
                     </ul>
                     <div class="tab-content" id="pills-tabContent">
                        <div class="tab-pane fade show active" id="pills-home" role="tabpanel"
                           aria-labelledby="pills-home-tab">
                           <h1>TANAYA NAIK</h1>
                           <p><b><i>Vision of the Institution:</b></i>
                              "To be globally acclaimed Institute in Technical Education and Research for
                              holistic Socio-economic development".<br><br>
                              <b><i>Mission of the Institution:</b></i>
```


 • To ensure that 100% students are employable and employed in Industry, Higher Studies, become Entrepreneurs,
Civil / Defense Services / Govt. Jobs and other areas like Sports and Theatre.

 • To strengthen Academic Practices in terms of Curriculum, Pedagogy, Assessment and Faculty Competence.

 • Promote Research Culture among Students and Faculty through Projects and Consultancy.

 • To make students Socially Responsible Citizen.

This is the TY-CS-D Syllabus.

<div class="tab-pane fade" id="pills-profile" role="tabpanel"
aria-labelledby="pills-profile-tab">
<h1>CLOUD_COMPUTING</h1>
Unit-I Introduction to Cloud Computing

[CO1 PO1, PO2, PO5 – CO Strength - 2,1,1]

Recent trends in computing, Cluster computing, Distributed computing ,Evolution of cloud
computing, Cloud versus traditional architecture, Cloud Computing Architecture, Google Cloud
architecture, Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service
(SaaS), Public cloud, Private cloud, Hybrid cloud, Community cloud [4 Hrs]

Unit-II Virtualization

[CO2 PO1, PO2, PO3, PO4, PO5- CO Strength -2,2,1,1,1]

Introduction to virtualization, Different approaches to virtualization, Hypervisors, Machine Image,
Virtual Machine (VM), Compute options in the cloud, Exploring IaaS with Compute Engine,
Configuring elastic apps with auto scaling, Basics of virtualization and implementation challenges.
System virtualization technologies-architectures and internals. KVM, Xen, VMware.
Memory virtualization-virtualization techniques, ballooning, deduplication and sharing. Network
Vishwakarma Institute of Technology, Issue 01 : Rev No. 1 : Dt. 01/07/18 FF-654
Computer Engineering Syllabus- AY 2022-23 Page 104
and storage virtualization, Virtual machine migration and replication techniques pre-copy and postcopy techniques, applicability to system availability. [6 Hrs]

Unit-III Cloud Services

[CO3] [PO1, PO2, PO3, PO4, PO5, PO7, PO8, PSO4 – Strength - 3,2,2,2,2,3,3,2]

Service Oriented Architecture (SOA), Web services, Web 2.0, Web OS. Introduction to IaaS, PaaS,
SaaS. Cloud Platform and Management, Exploring PaaS with App Engine, Event driven programs
with Cloud Functions, Containerizing and orchestrating apps with Google Kubernetes Engine
Software as a Service (SaaS) Docker flow, orchestration with Docker, dynamic linking and legacy
linking of containers. The GCP Console, understanding projects, Billing in GCP, Install and
configure Cloud SDK, Use Cloud Shell, GCP APIs. [4 Hrs]

SECTION-II

Unit-IV Cloud Storage

[CO4 PO1, PO2, PO3, PO4, PO5, PO6, PO9- Strength 3,2,2,2,3,3,3]

Storage options in the cloud, Structured and unstructured storage in the cloud, unstructured storage
using Cloud Storage, SQL managed services, Exploring Cloud SQL, Cloud Spanner as a managed
service, NoSQL managed service options, Cloud Datastore, a NoSQL document store, Cloud
Bigtable as a NoSQL option. OpenStack: NOVA, Neutron, Keystone Cinder, Swift and
Glances,
VMware Suit, Apache Cloud Stack [4 Hrs]

Unit-V Service Management

[CO5 PO1,PO2,PO3,PO4,PO5,PO9,PO11,PSO2-Strength 3,3,1.3,3,1,2,3]

Service Level Agreements (SLAs), Billing and accounting, Billing in GCP Cloud Security:
Introduction to security in the cloud, the shared security model, Encryption options, Authentication
and authorization with Cloud IAM, Identify Best Practices for Authorization using Cloud IAM.,
Introduction to configuration and management tools Ansible, Architecture of DevOps. [4 Hrs]

Unit-VI Cloud Network and Security

[CO6 PO1, PO2, PO3, PO4, PO5, PO10, PO12 - Strength 2,2,1,3,1,3]

Introduction to networking in the cloud, defining a Virtual Private Cloud, Public and private IP

address basics, Google’s network architecture, Routes and firewall rules in the cloud, Multiple VPC
networks, building hybrid clouds using VPNs, interconnecting, and direct peering, Different options
for load balancing. Introduction to security in the cloud, the shared security model, Encryption
options, Authentication and authorization with Cloud IAM, Identify Best Practices for Authorization
using Cloud IAM. [6 Hrs]

<div class="tab-pane fade" id="pills-contact" role="tabpanel"
aria-labelledby="pills-contact-tab">
<h1>WEB_TECHNOLOGY</h1>
Unit-I Front End Tools

[CO1 PO1, PO2, PO5 – CO Strength 3,2,2]

Introduction to web technology, internet and www, Web site planning and design issues. HTML5:
structure of html document, HTML elements: headings, paragraphs, line break, styles, colors, fonts,
Vishwakarma Institute of Technology, Issue 01 : Rev No. 1 : Dt. 01/07/18 FF-654 Computer Engineering Syllabus- AY 2022-23 Page 94
links, frames, lists, tables, images and forms, CSS, Bootstrap, XML, JSON. [4 Hrs]

Unit-II Client-Side Technologies

[CO2 PO1, PO2, PO3, PO5, PO12 – CO Strength 3,2,2,1,3]

JavaScript: Overview of JavaScript, Data types, Control Structures, Arrays, Functions and Scopes,
HTML5 forms Validation, Objects in JS, DOM: DOM levels, DOM Objects and their properties and
methods, Manipulating DOM. JQuery: Introduction to JQuery, Loading JQuery, selecting elements,
changing styles, creating elements, appending elements, removing elements, handling events. [6
Hrs]

Unit-III Server-Side Technologies

[CO3 PO1, PO2, PO3, PO4, PO6 - CO Strength 2,3,3,2,3]

PHP: Introduction to PHP, Features, sample code, PHP script working, PHP syntax, conditions &
Loops, Functions, String manipulation, Arrays & Functions, Form handling, Cookies & Sessions,

```
                    File Handling, Exception Handling, E-mail validations, MySQL with PHP [4 Hrs]
                </p>

                <p>SECTION-II
                    <br>
                    Unit-IV Spring Boot
                    <br>[CO4 PO1, PO2, PO3, PO7, PO10, PSO4 – CO Strength 3, 2, 3, 3, 3, 3]
                    <br>
                    Overview of Spring Boot, Spring Framework, Installing Spring Boot, Build Tool
                    Maven/Gradle/Ant, Core Features, Spring Security, Web Applications, JPA for
                    database
                    connectivity, working with SQL and NoSQL, Messaging, Testing, Deploying Spring
                    Boot
                    Applications, Monitoring. [6 Hrs]
                </p>

                <p> Unit-V React
                    <br>[CO5 PO1, PO2, PO4, PO5, PO8, PO11, PSO1, PSO3–CO Strength 3, 3, 2, 3,
                    3, 3, 3, 3]
                    <br>
                    Introduction to React, React component, JSX, Render function, Component API,
                    Component
                    lifecycle, State, Props, Mixins, Component composition, Pass data from parent to
                    child, Pass data
                    from child to parent, Component styling, Forms, Events, Refs, Keys, Router,
                    Flux. [4 Hrs]
                </p>


                <p>Unit-VI Node JS
                    <br>[CO6 PO1, PO2 PO4 PO9 – CO Strength 3, 2, 2, 3]
                    <br>
                    Introduction to Node JS, Installation of Node JS, Node JS Modules, Node Package
                    Manager (npm),
                    Creating Web server, File System, Express JS, Serving Static Resources, Database
                    connectivity. [4
                    Hrs]
                </p>
            </div>
        </div>
    </div>
</div>
</body>

</html>
```

Pills.css

```
.video-background {
  position: fixed;
  right: 0;
  bottom: 0;
  min-width: 100%;
  min-height: 100%;
  z-index: -1;
  overflow: hidden;
}

#bgvid {
  position: absolute;
  top: 50%;
  left: 50%;
  transform: translateX(-50%) translateY(-50%);
  width: auto;
  height: auto;
  z-index: -1;
}

.video-overlay {
  position: absolute;
  top: 0;
  left: 0;
  width: 100%;
  height: 100%;
  background-color: rgba(0,0,0,0.5);
  pointer-events: none;
  z-index: -1;
}

.video-content {
  position: relative;
  z-index: 1;
  color: #fff;
}

.tab-wrapper {
  background-color: rgba(0,0,0,0.5);
  border-radius: 5px;
  padding: 20px;
}

.nav-pills .nav-link.active, .nav-pills .show > .nav-link {
  background-color: #fff;
  color: #333;
}
```

```
.nav-pills .nav-link {
  color: #fff;
}

.tab-content {
  background-color: rgba(255,255,255,0.5);
  border-radius: 5px;
  padding: 20px;
  overflow-y: scroll;
  max-height: 500px;
}
```

Output: