

Firstprogram

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<title>Event Management</title>
```

```
<!-- Bootstrap CSS -->
```

```
<link
```

```
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
```

```
rel="stylesheet"
```

```
/>
```

```
<style>
```

```
body {
```

```
font-family: Arial, sans-serif;
```

```
}
```

```
.hero {
```

```
background: #141214;
```

```
color: white;
```

```
padding: 60px 20px;
```

```
text-align: center;
```

```
}
```

```
footer {
```

```
background: #222;
```

```
color: white;
```

```
padding: 15px;
```

```
text-align: center;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<!-- HEADER -->
```

```
<header>
```

```
<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
```

```
<div class="container">
```

```
<a class="navbar-brand" href="#">Event Management</a>
```

```
<button
```

```
class="navbar-toggler"
```

```
type="button"
```

```
data-bs-toggle="collapse"
```

```
data-bs-target="#menu"
```

```
>
```

```
<span class="navbar-toggler-icon"></span>
```

```
</button>
```

```
<div class="collapse navbar-collapse" id="menu">
```

```
<ul class="navbar-nav ms-auto">
```

```
<li class="nav-item"><a class="nav-link" href="#events">More Events</a></li>
```

```
<li class="nav-item"><a class="nav-link" href="#register">Register</a></li>
```

```
</ul>
```

```
</div>
```

```
</div>
```

```
</nav>
```

```
</header>
```

```
<main>
```

```
<section class="hero">
```

```
<h1>Event Management</h1>
```

```
</section>
```

```
<section class="container my-5">
```

```
<div id="eventCarousel" class="carousel slide" data-bs-ride="carousel">
```

```
<div class="carousel-inner">
```

```
<div class="carousel-item active">
```

```

```

</div>

<div class="carousel-item">

</div>

<div class="carousel-item">

</div>

</div>

</div>

</section>

<section id="events" class="container my-5">

<h2 class="text-center mb-4"> Events</h2>

<div class="row g-4">

<div class="col-md-4">

```
<div class="card h-100">
```

```
<div class="card-body">
```

```
<h5 class="card-title">Tech Conference</h5>
```

```
<p class="card-text">Join with industry experts</p>
```

```
<button class="btn btn-primary" data-bs-toggle="modal" data-bs-target="#detailsModal">
```

```
View
```

```
</button>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="col-md-4">
```

```
<div class="card h-100">
```

```
<div class="card-body">
```

```
<h5 class="card-title">Wedding Event</h5>
```

```
<p class="card-text"> wedding.</p>
```

```
<button class="btn btn-primary">View </button>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="col-md-4">
```

```
<div class="card h-100">
```

```
<div class="card-body">
```

```
<h5 class="card-title">Musical Event</h5>
```

```
<p class="card-text"> music</p>
```

```
<button class="btn btn-primary">View </button>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</section>
```

```
<section id="register" class="container my-5">
```

```
<h2 class="text-center mb-4">Registration</h2>
```

```
<form class="row g-3 needs-validation" novalidate>
```

```
<div class="col-md-6">
```

```
<label class="form-label">Name</label>
```

```
<input type="text" class="form-control" required />
```

```
<div class="invalid-feedback">Name is required</div>
```

```
</div>
```

```
<div class="col-md-6">
```

```
<label class="form-label">Email</label>
```

```
<input type="email" class="form-control" required />
```

```
<div class="invalid-feedback">Valid email required</div>
```

```
</div>
```

```
<div class="col-12 text-center">
```

```
<button class="btn btn-success" type="submit">Register</button>
```

```
</div>
```

</form>

</section>

</main>

<footer>

<p>© All Rights Reserved.</p>

</footer>

<div class="modal fade" id="detailsModal" tabindex="-1">

<div class="modal-dialog">

<div class="modal-content">

<div class="modal-header">

<h5 class="modal-title"> Conference</h5>

<button class="btn-close" data-bs-dismiss="modal"></button>

</div>

<div class="modal-body">

Learn and upgrade

</div>

</div>

</div>

</div>

```
<script  
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>
```

```
<script>
```

```
(() => {
```

```
const forms = document.querySelectorAll(".needs-validation");
```

```
forms.forEach(form => {
```

```
form.addEventListener("submit", event => {
```

```
if (!form.checkValidity()) {
```

```
event.preventDefault();
```

```
event.stopPropagation();
```

```
}
```

```
form.classList.add("was-validated");
```

```
});
```

```
});
```

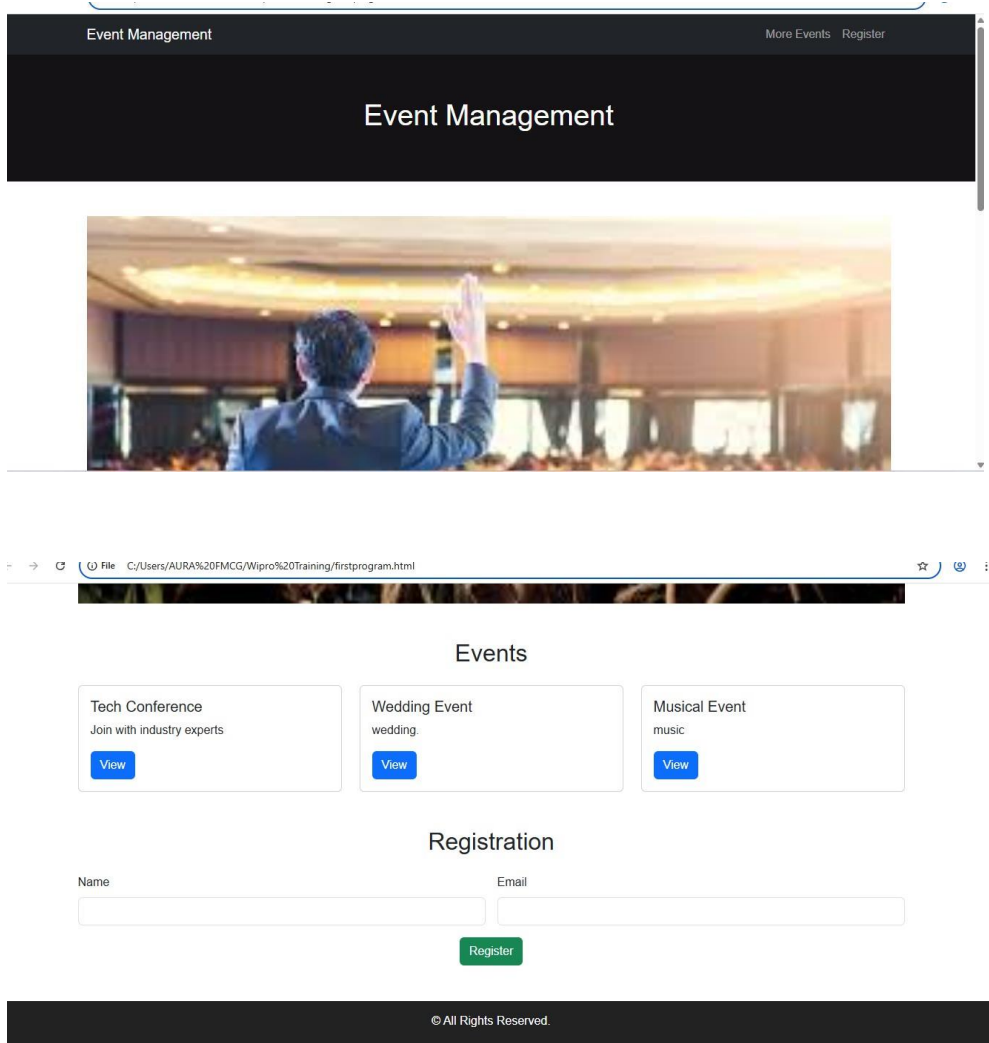
```
})();
```

```
</script>
```

```
</body>
```

```
</html>
```

Output:



Second program:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<title>Event Dashboard</title>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
<style>
```

```
body {
```

```
    font-family: Arial, sans-serif;
```

```
    background: #9abee2;
```

```
    color: black;
```

```
    padding: 20px;
```

```
    text-align: center;
```

```
}
```

```
.filters {
```

```
display: flex;
```

```
gap: 10px;
```

```
justify-content: center;
```

```
margin-bottom: 20px;
```

```
}
```

```
.events {
```

```
display: grid;
```

```
gap: 15px;
```

```
}
```

```
.card {
```

```
background: white;
```

```
padding: 15px;
```

```
border-radius: 6px;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1 style="text-align:center">Event Dashboard</h1>
```

```
<div class="filters">
```

```
<select id="categoryFilter">
```

```
<option value="Events"> Events</option>
```

```
<option value="Fun">Fun</option>
```

```
<option value="Technology">Technology</option>
```

```
<option value="Music">Music</option>
```

```
</select>
```

```
<input type="date" id="dateFilter" />
```

```
</div>
```

```
<div class="events" id="eventContainer"></div>
```

```
<script>
```

```
const Events = [
```

```
{
```

```
  id: 1,
```

```
  title: "Standup show",
```

```
  category: "Fun",
```

```
  date: "09/02/2026",
```

```
  location: "Coimbatore"
```

```
},
```

```
{
```

```
  id: 2,
```

```
  title: "Music Carnival",
```

```
  category: "Music",
```

```
  date: "02.12.2026",
```

```
  location: "Trichy"
```

```
},
```

```
{
```

```
id: 3,

title: "Conference",

category: "Technical",

date: "05.09.2026",

location: "Chennai"

}

];

const eventContainer = document.getElementById("eventContainer");

const categoryFilter = document.getElementById("categoryFilter");

const dateFilter = document.getElementById("dateFilter");

let allEvents = [];

const fetchEvents = async () => {

  return new Promise((resolve, reject) => {

    setTimeout(() => {

      resolve(Events);

    }, 500);
```

```
});
```

```
};
```

```
const renderEvents = (events) => {
```

```
  eventContainer.innerHTML = "";
```

```
  events.forEach(({ title, category, date, location }) => {
```

```
    eventContainer.innerHTML += `
```

```
    <div class="card">
```

```
      <h3>${title}</h3>
```

```
      <p><strong>Category:</strong> ${category}</p>
```

```
      <p><strong>Date:</strong> ${date}</p>
```

```
      <p><strong>Location:</strong> ${location}</p>
```

```
    </div>
```

```
    `
```

```
  });
```

```
};
```

```
const applyFilters = () => {

  const selectedCategory = categoryFilter.value;

  const selectedDate = dateFilter.value;

  const filteredEvents = allEvents.filter(event => {

    const categoryMatch =

      selectedCategory === "All" || event.category === selectedCategory;

    const dateMatch =

      !selectedDate || event.date === selectedDate;

    return categoryMatch && dateMatch;

  });

  renderEvents(filteredEvents);

};

categoryFilter.addEventListener("change", applyFilters);

dateFilter.addEventListener("change", applyFilters);

fetchEvents().then(data => {

  allEvents = data;
```

```

        renderEvents(allEvents);

    });

</script>

</body>

</html>

```

Output:

Event Dashboard	
Events	dd-mm-yyyy
Standup show Category: Fun Date: 09/02/2026 Location: Coimbatore	
Music Carnival Category: Music Date: 02.12.2026 Location: Trichy	
Conference Category: Technical Date: 05.09.2026 Location: Chennai	

Third Program:

```

enum Membership {
    Standard = "STANDARD",
    Premium = "PREMIUM",
    VIP = "VIP",
}

interface Customer {
    id: number;
    name: string;
    email: string;
}

```

```
function logRegistration(constructor: Function) {
    console.log(`Registered class: ${constructor.name} (${new Date().toLocaleString()})`);
}
```

@logRegistration

class EventCustomer implements Customer {

```
    constructor(
        public id: number,
        public name: string,
        public email: string,
        public membership: Membership
    ) {}
```

```
    getSummary() {
        return `${this.name} (${this.membership})`;
    }
}
```

```
const customer = new EventCustomer(101, "Anusiya", "anusiyaanu@gmail.com",
Membership.Premium);
```

```
console.log("Customer Summary:", customer.getSummary());
```

// Process multiple customers

```
[customer].forEach(c => console.log(`Processing customer: ${c.name}`));
```

Output:

The screenshot shows a VS Code editor with a TypeScript file named `CustomerModule.ts`. The code in the file defines a `logRegistration` function, a `@logRegistration` decorator, an `EventCustomer` class, and a `customer` instance. The terminal output shows the execution of the code, displaying the registered class, the customer summary, and the processing of the customer.

```
userstory3 > JS CustomerModule.js > ...
1  var __esDecorate = (this && this.__esDecorate) || function (ctor, descriptorIn, decorators, contextIn
2  function accept(f) { if (f !== void 0 && typeof f !== "function") throw new TypeError("Function e
3  var kind = contextIn.kind, key = kind === "getter" ? "get" : kind === "setter" ? "set" : "value";
4  var target = !descriptorIn && ctor ? contextIn["static"] ? ctor : ctor.prototype : null;
5  var descriptor = descriptorIn || (target ? Object.getOwnPropertyDescriptor(target, contextIn.name
6  var _, done = false;
7  for (var i = decorators.length - 1; i >= 0; i--) {
8      var context = {};
9      for (var p in contextIn) context[p] = p === "access" ? {} : contextIn[p];
10     for (var p in contextIn.access) context.access[p] = contextIn.access[p];
11     context.addInitializer = function (f) { if (done) throw new TypeError("Cannot add initializer
12     var result = (0, decorators[i])(kind === "accessor" ? { get: descriptor.get, set: descriptor.
13     if (kind === "accessor") {
14     console.log(`Registered class: ${constructor.name} (${new Date().toLocaleString()})`);
15
Found 1 error in CustomerModule.ts:14
PS D:\Mock Practice\userstory3> tsc CustomerModule.ts
PS D:\Mock Practice\userstory3> node CustomerModule.js
Registered class: EventCustomer (27/1/2026, 9:17:17 pm)
Customer Summary: Anusiya (PREMIUM)
Processing customer: Anusiya
PS D:\Mock Practice\userstory3> 
```