1. Create a Student Admission Form using JavaScript DOM manipulation and validation; Initialize Git for version control.

 Index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Student Admission Form</title>
    <style>
        /* General Body Styling - Keep for centering and basic font */
        body {
            font-family: sans-serif; /* Simpler default font */
            background-color: #f3f4f6;
            display: flex;
            justify-content: center;
            align-items: center;
            min-height: 100vh;
            padding: 20px;
            box-sizing: border-box;
            margin: 0;
        }

        /* Form Container - Basic centering and width */
        .form-container {
            background-color: #fff;
            padding: 20px; /* Reduced padding */
            border-radius: 8px;
            box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1); /* Lighter shadow */
            width: 100%;
            max-width: 450px; /* Slightly smaller max width */
            border: 1px solid #ddd; /* Lighter border */
        }

        /* Form Title - Basic alignment and font size */
        .form-title {
            font-size: 24px;
            text-align: center;
            margin-bottom: 20px;
            color: #333;
        }

        /* Form Group - Basic spacing between fields */
        .form-group {
            margin-bottom: 15px;
        }
```

```css
/* Labels - Keep them block level for consistent layout */
.form-label {
    display: block;
    margin-bottom: 5px;
    font-weight: bold;
    color: #555;
}

/* Inputs and Select - Minimal styling, mostly browser default */
.form-input,
.form-select {
    width: 100%;
    padding: 8px;
    border: 1px solid #ccc;
    border-radius: 4px;
    box-sizing: border-box; /* Ensures padding doesn't add to total
width */
}

/* Checkbox Group - Basic flex for alignment */
.checkbox-group {
    display: flex;
    align-items: center;
    margin-bottom: 15px;
}

/* Checkbox Label - Simple spacing */
.checkbox-label {
    margin-left: 8px;
}

.checkbox-label a {
    color: #007bff; /* Standard link blue */
    text-decoration: none;
}

.checkbox-label a:hover {
    text-decoration: underline;
}

/* Submit Button - Basic, relies on browser default look more */
.submit-button {
    width: 100%;
    padding: 10px;
    background-color: #007bff; /* Standard button blue */
    color: white;
    border: none;
    border-radius: 4px;
```

```css
            cursor: pointer;
            font-size: 16px;
        }

        .submit-button:hover {
            background-color: #0056b3; /* Darker blue on hover */
        }

        /* Error Message Styling - Essential for feedback */
        .error-message {
            color: red;
            font-size: 12px;
            margin-top: 5px;
        }

        /* Success Message Styling - Essential for feedback */
        #success-message {
            margin-top: 20px;
            padding: 10px;
            border-radius: 4px;
            background-color: #d4edda; /* Light green */
            color: #155724; /* Dark green text */
            text-align: center;
            /* display: none; Initially hidden */
        }

        /* Hide utility class - Essential for JavaScript functionality */
        .hidden {
            display: none;
        }
    </style>
</head>
<body>

    <div class="form-container">
        <h2 class="form-title">Student Admission Form</h2>

        <form id="admissionForm">
            <!-- Full Name Input -->
            <div class="form-group">
                <label for="fullName" class="form-label">Full Name</label>
                <input type="text" id="fullName" class="form-input"
placeholder="John Doe">
                <p id="fullNameError" class="error-message"></p>
            </div>

            <!-- Email Input -->
            <div class="form-group">
```

```html
            <label for="email" class="form-label">Email Address</label>
            <input type="email" id="email" class="form-input"
placeholder="john.doe@example.com">
            <p id="emailError" class="error-message"></p>
        </div>

        <!-- Date of Birth Input -->
        <div class="form-group">
            <label for="dateOfBirth" class="form-label">Date of
Birth</label>
            <input type="date" id="dateOfBirth" class="form-input">
            <p id="dateOfBirthError" class="error-message"></p>
        </div>

        <!-- Course Selection -->
        <div class="form-group">
            <label for="course" class="form-label">Select Course</label>
            <select id="course" class="form-select">
                <option value="">-- Please Select --</option>
                <option value="computer_science">Computer Science</option>
                <option value="business_administration">Business
Administration</option>
                <option value="electrical_engineering">Electrical
Engineering</option>
                <option value="arts_humanities">Arts & Humanities</option>
            </select>
            <p id="courseError" class="error-message"></p>
        </div>

        <!-- Terms and Conditions Checkbox -->
        <div class="checkbox-group">
            <input type="checkbox" id="terms" class="form-checkbox">
            <label for="terms" class="checkbox-label">
                I agree to the <a href="#">terms and conditions</a>
            </label>
            <p id="termsError" class="error-message" style="margin-left:
8px;"></p>
        </div>

        <!-- Submit Button -->
        <div class="form-group">
            <button type="submit" class="submit-button">
                Submit Admission
            </button>
        </div>
    </form>
```

```html
    <!-- Success Message -->
        <div id="success-message" class="hidden">
            <p>Form submitted successfully! We'll be in touch soon.</p>
        </div>
    </div>

    <script>
        // Get the form element
        const admissionForm = document.getElementById('admissionForm');
        // Get the success message element
        const successMessage = document.getElementById('success-message');

        // Add an event listener for form submission
        admissionForm.addEventListener('submit', function(event) {
            // Prevent the default form submission behavior (which would
reload the page)
            event.preventDefault();
            // Call the validateForm function and check its return value
            if (validateForm()) {
                // If validation passes, display the success message
                successMessage.classList.remove('hidden'); // Show the success
message
                admissionForm.reset(); // Optionally reset the form fields
            } else {
                // If validation fails, ensure the success message is hidden
                successMessage.classList.add('hidden');
            }
        });

        /**
         * Validates all form fields.
         * @returns {boolean} - True if all fields are valid, false otherwise.
         */
        function validateForm() {
            let isValid = true; // Flag to track overall form validity

            // Get references to all input fields and their error message
paragraphs
            const fullNameInput = document.getElementById('fullName');
            const emailInput = document.getElementById('email');
            const dateOfBirthInput = document.getElementById('dateOfBirth');
            const courseSelect = document.getElementById('course');
            const termsCheckbox = document.getElementById('terms');

            const fullNameError = document.getElementById('fullNameError');
            const emailError = document.getElementById('emailError');
            const dateOfBirthError =
document.getElementById('dateOfBirthError');
```

```javascript
            const courseError = document.getElementById('courseError');
            const termsError = document.getElementById('termsError');

            // --- Full Name Validation ---
            if (fullNameInput.value.trim() === '') {
                fullNameError.textContent = 'Full Name is required.';
                isValid = false;
            } else {
                fullNameError.textContent = ''; // Clear error if valid
            }

            // --- Email Validation ---
            const emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/; // Basic email
regex
            if (emailInput.value.trim() === '') {
                emailError.textContent = 'Email Address is required.';
                isValid = false;
            } else if (!emailRegex.test(emailInput.value.trim())) {
                emailError.textContent = 'Please enter a valid email
address.';
                isValid = false;
            } else {
                emailError.textContent = '';
            }

            // --- Date of Birth Validation ---
            const dobValue = dateOfBirthInput.value; // Get the date string
(e.g., "YYYY-MM-DD")
            if (dobValue === '') {
                dateOfBirthError.textContent = 'Date of Birth is required.';
                isValid = false;
            } else {
                const selectedDate = new Date(dobValue);
                const today = new Date();
                if (selectedDate > today) {
                    dateOfBirthError.textContent = 'Date of Birth cannot be in
the future.';
                    isValid = false;
                } else {
                    dateOfBirthError.textContent = '';
                }
            }


            // --- Course Selection Validation ---
            if (courseSelect.value === '') {
                courseError.textContent = 'Please select a course.';
                isValid = false;
            } else {
```

```
                courseError.textContent = '';
            }

            // --- Terms and Conditions Validation ---
            if (!termsCheckbox.checked) {
                termsError.textContent = 'You must agree to the terms and
conditions.';
                isValid = false;
            } else {
                termsError.textContent = '';
            }

            return isValid; // Return the overall validity status
        }
    </script>
</body>
</html>
```
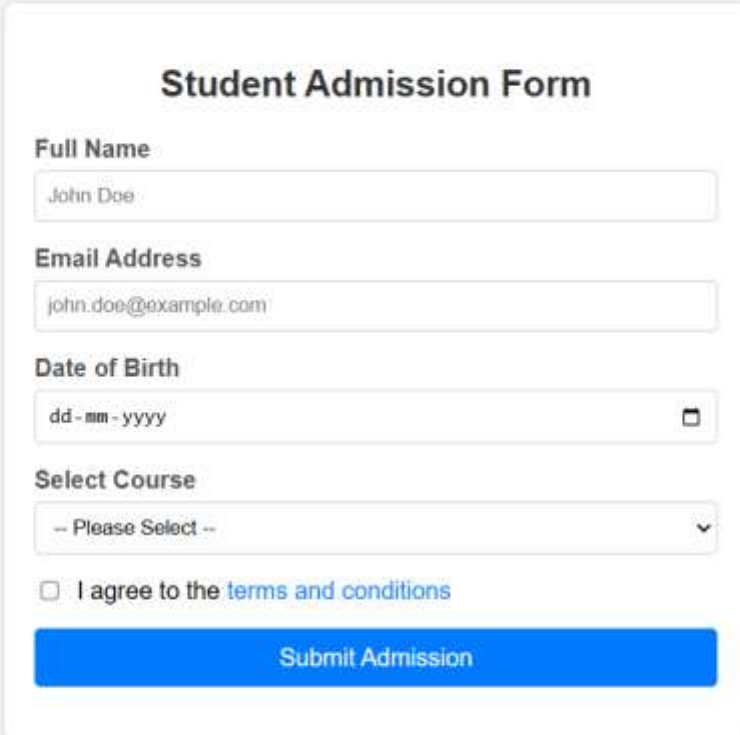
OUTPUT:

Student Admission Form

Full Name

John Doe

Email Address

john.doe@example.com

Date of Birth

dd-mm-yyyy

Select Course

-- Please Select --

☐ I agree to the terms and conditions

Submit Admission

Student Admission Form

Full Name

John Doe

Full Name is required

Email Address

john.doe@example.com

Email Address is required

Date of Birth

dd - mm - yyyy 🗓

Date of Birth is required

Select Course

-- Please Select -- ⌄

Please select a course.

☐ I agree to the terms and conditions   You must agree to the terms and conditions.

Submit Admission

Student Admission Form

Full Name

John Doe

Email Address

john.doe@example.com

Date of Birth

dd - mm - yyyy 🗓

Select Course

-- Please Select -- ⌄

☐ I agree to the terms and conditions

Submit Admission

Form submitted successfully! We'll be in touch soon.