

# MongoDB Credentials Form: Code Explanation & Setup Guide

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This document provides a breakdown of the MongoDB Credentials Form component, including its structure, installation, and best practices.

### 1 Imports 📦

The following libraries and components are used in this project:

```
'use client' // Ensures the component runs on the client-side in Next.js
```

  

```
import { useState } from "react"; // React's useState hook for state management
```

  

```
import { Card, CardContent, CardDescription, CardHeader, CardTitle } from "@components/ui/card";  
// ShadCN UI's Card component for styling
```

  

```
import { ChevronDown, ChevronUp, Database, Key, Server, User } from "lucide-react";  
// Lucide Icons for a modern UI
```

  

```
import { Label } from "@radix-ui/react-label";  
import { Input } from "@components/ui/input";  
import { Collapsible, CollapsibleContent, CollapsibleTrigger } from "@radix-ui/react-collapsible";  
import { Button } from "@components/ui/button";  
// Radix UI & ShadCN components for UI interactions.
```

---

## 2 State Management

The component manages user inputs and UI state using useState:

```
const [formData, setFormData] = useState({
  username: "",
  password: "",
  clusterName: "",
  hostname: "",
});

const [isOpen, setIsOpen] = useState(false); // Controls the
collapsible section
```

---

## 3 Handle Input Change

This function updates the form fields dynamically as the user types:

```
const handleChange = (e: React.ChangeEvent<HTMLInputElement>)
=> {
  setFormData({ ...formData, [e.target.name]: e.target.value });
};
```

---

## 4 UI Structure

The form is built using a card container with form fields and labels.

### Card Container

A centered card with shadows & borders for a sleek look:

```
<Card className="w-full max-w-md border-2 border-gray-900
shadow-lg">
```

---

### Form Fields

Each field includes a label, an input field, and an icon:

```
<Label htmlFor="username" className="flex items-center gap-2
font-semibold">
  <User className="h-4 w-4 text-blue-500" /> Username
</Label>
<Input id="username" name="username" placeholder="Your
MongoDB username" onChange={handleChange}
className="border-2 border-gray-800 placeholder-gray-400"
required />
```

---

## 6 Submit Button ⓘ

A black button with a hover effect that turns transparent:

```
<Button type="submit" className="w-full bg-black hover:bg-transparent hover:text-black border-2 border-black transition-all duration-500">  
  Submit Credentials  
</Button>
```

---

## 🔧 Installation Instructions

Run the following commands in your Next.js project:

### 1 Install lucide-react (Icons) 📦

```
npm install lucide-react
```

---

### 2 Install & Initialize shadcn/ui (UI Components) 💡

```
npx shadcn@latest init -d
```

---

### 3 Add UI Components (Card, Input, Button) 📁

```
npx shadcn@latest add card input button
```

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### 4 Install @radix-ui/react-label (Form Labels) 🏷️

```
npm install @radix-ui/react-label
```

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### 5 Install @radix-ui/react-collapsible (Expandable Sections) ▼

```
npm install @radix-ui/react-collapsible
```

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