

Full-Stack Web Dev Training- Report

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Define Database Schema

Relationships Between Tables

Users ↔ Documents (One-to-Many):

A single user can upload multiple documents.

Documents ↔ VerificationLogs (One-to-Many):

A single document can have multiple verification logs (e.g., if it is verified multiple times or if the status changes).

(Foreign Key).

Users ↔ VerificationLogs (One-to-Many):

A single user (verifier) can verify multiple documents.

```

3 references
public class User
{
    [Key]
    0 references
    public int Id { get; set; }

    [Required, MaxLength(100)]
    0 references
    public string Name { get; set; }

    [Required, EmailAddress, MaxLength(255)]
    0 references
    public string Email { get; set; }

    [Required]
    0 references
    public string Password { get; set; }

    [Required, MaxLength(50)]
    0 references
    public string Role { get; set; }

    // One to many relationship with the Document table
    0 references
    public List<Document> Documents { get; set; }

    // One to many relationship with the VerificationLog table
    0 references
    public List<VerificationLog> VerificationLogs { get; set; }
}

```

```

3 references
public class Document
{
    [Key]
    0 references
    public int Id { get; set; }

    [Required]
    0 references
    public int UserId { get; set; }

    [Required, MaxLength(255)]
    0 references
    public string Title { get; set; }

    [Required, MaxLength(500)]
    0 references
    public string FilePath { get; set; }

    [MaxLength(100)]
    0 references
    public string VerificationCode { get; set; }

    [Required, MaxLength(50)]
    0 references
    public string Status { get; set; }

    [Required]
    0 references
    public DateTime CreatedAt { get; set; }

    [ForeignKey("UserId")]
    0 references
    public User User { get; set; }

    // One to many relationship with the VerificationLog table
    0 references
    public List<VerificationLog> VerificationLogs { get; set; }
}

```

```

public class VerificationLog
{
    [Key]
    0 references
    public int Id { get; set; }

    [Required]
    1 reference
    public int DocumentId { get; set; }

    [Required]
    1 reference
    public int VerifiedBy { get; set; }

    [Required]
    0 references
    public DateTime Timestamp { get; set; }

    [Required, MaxLength(50)]
    0 references
    public string Status { get; set; }

    // Navigation properties
    [ForeignKey("DocumentId")]
    1 reference
    public Document Document { get; set; }

    [ForeignKey("VerifiedBy")]
    1 reference
    public User User { get; set; }
}

```

```

info: Microsoft.EntityFrameworkCore.Database.Command[20101]
info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (2ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      DECLARE @result int;
      EXEC @result = sp_releaseapplock @Resource = '__EFMigrationsLock', @LockOwner = 'Session';
      EXEC @result = sp_releaseapplock @Resource = '__EFMigrationsLock', @LockOwner = 'Session';
      SELECT @result
      SELECT @result

```

Done.

Object Explorer

Connect ▾



(localdb)\MSSQLLocalDB (SQL Server 15.0.4382 - RAZAN_CSLAP2024\razan)

- [-] Databases
 - [+] System Databases
 - [+] Database Snapshots
 - [-] DocumentVerificationDB
 - [+] Database Diagrams
 - [-] Tables
 - [+] System Tables
 - [+] FileTables
 - [+] External Tables
 - [+] Graph Tables
 - [+] dbo.__EFMigrationsHistory
 - [+] dbo.Documents
 - [+] dbo.Users
 - [+] dbo.VerificationLogs

100 %



Results



Messages

	Id	VerifiedBy	Timestamp	Status	DocumentId
1	1	1	2025-03-08 01:20:57.9171234	Verified	2

	Id	Name	Email	Password	Role
1	1	John Doe	john.doe@example.com	password123	Admin
2	2	Jane Smith	jane.smith@example.com	password456	User

	Id	UserId	Title	FilePath	VerificationCode	Status	CreatedAt
1	1	1	Identity Proof	/documents/identity_proof.pdf	ABC123	Pending	2025-03-08 01:20:57.8809295
2	2	2	Address Proof	/documents/address_proof.pdf	XYZ789	Verified	2025-03-07 01:20:57.8818864

Implement Backend API

HTTP

VerificationSystem / Retriving Doc

Save

Share

GET

▼

http://localhost:5075/api/documents/1

Send

▼

Params

Authorization

Headers (6)

Body

Scripts

Settings

Cookies

Query Params

	Key	Value	Description	⋮ Bulk Edit
	Key	Value	Description	

Body

Cookies

Headers (4)

Test Results

↺

200 OK

• 173 ms • 360 B • 🌐

| e.g. Save Response

⋮

{ } JSON ▼

▶ Preview

🔗 Visualize

▼

⌵

📄

🔍

🔗

1 {

2 "id": 1,

3 "userId": 1,

4 "title": "Identity Proof",

5 "filePath": "/documents/identity_proof.pdf",

6 "verificationCode": "ABC123",

7 "status": "Pending",

8 "createdAt": "2025-03-08T01:20:57.8809295",

9 "user": null,

10 "verificationLogs": null

11 }

GET

▼

http://localhost:5075/api/documents/2

Send

▼

Params

Authorization

Headers (6)

Body

Scripts

Settings

Cookies

Query Params

	Key	Value	Description	⋮ Bulk Edit
	Key	Value	Description	

Body

Cookies


Headers (4)


Test Results

↺

200 OK

• 17 ms • 359 B •




 Save Response

⋮

{ } JSON ▼

▶ Preview

 Visualize ▼

```
1  {
2    "id": 2,
3    "userId": 2,
4    "title": "Address Proof",
5    "filePath": "/documents/address_proof.pdf",
6    "verificationCode": "XYZ789",
7    "status": "Verified",
8    "createdAt": "2025-03-07T01:20:57.8818864",
9    "user": null,
10   "verificationLogs": null
11 }
```

POST

http://localhost:5075/api/documents

Send

- Params
- Authorization
- Headers (8)
- Body
- Scripts
- Settings
- Cookies
- none
- form-data
- x-www-form-urlencoded
- raw
- binary
- GraphQL
- JSON
- Beautify

```
1 {
2   "userId": 1,
3   "title": "Passport",
4   "filePath": "/documents/passport.pdf",
5   "status": "Pending"
6 }
```

Body

Cookies

Headers (5)

Test Results

201 Created

325 ms

389 B

Save Response

{ } JSON

Preview

Visualize

```
1 {
2   "id": 3,
3   "userId": 1,
4   "title": "Passport",
5   "filePath": "/documents/passport.pdf",
6   "verificationCode": "24440ae0",
7   "status": "Pending",
8   "createdAt": "2025-03-08T03:07:49.6146402",
9   "user": null,
10  "verificationLogs": null
11 }
```

	Id	UserId	Title	FilePath	VerificationCode	Status	CreatedAt
1	1	1	Identity Proof	/documents/identity_proof.pdf	ABC123	Pending	2025-03-08 01:20:57.8809295
2	2	2	Address Proof	/documents/address_proof.pdf	XYZ789	Verified	2025-03-07 01:20:57.8818864
3	3	1	Passport	/documents/passport.pdf	24440ae0	Pending	2025-03-08 03:07:49.6146402

POST

http://localhost:5075/api/verify

Send

Params

Authorization

Headers (8)

Body

Scripts

Settings

Cookies

☐ none

☐ form-data

☐ x-www-form-urlencoded

☒ raw

☐ binary

☐ GraphQL

JSON

Beautify

```
1  {
2    "id": 2,
3    "verificationCode": "XYZ789"
4  }
```

Body

Cookies

Headers (4)

Test Results



200 OK

• 556 ms

• 181 B



Save Response



{ } JSON

Preview

Visualize



```
1  "Document verified successfully!"
```

POST

http://localhost:5075/api/verify

Send

Params

Authorization

Headers (8)

Body

Scripts

Settings

Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL JSON

Beautify

```
1  {
2    "id": 1,
3    "verificationCode": "ABC123"
4  }
```

Body Cookies Headers (4) Test Results



401 Unauthorized

16 ms

201 B



e.g.

Save Response



{ } JSON

Preview



Visualize



```
1  {
2    "message": "Document verification failed."
3  }
```

Create Angular Components

✓ src

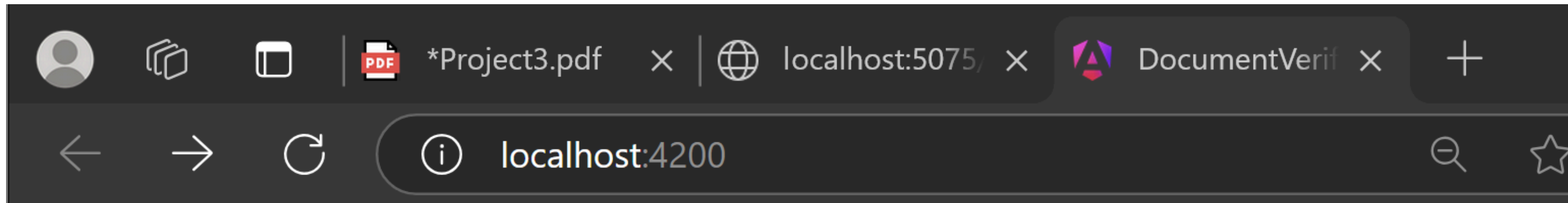
✓ app

> dashboard

> document-upload

> verification

**Develop a
DashboardComponent for
document listing.**



Document Details Dashboard

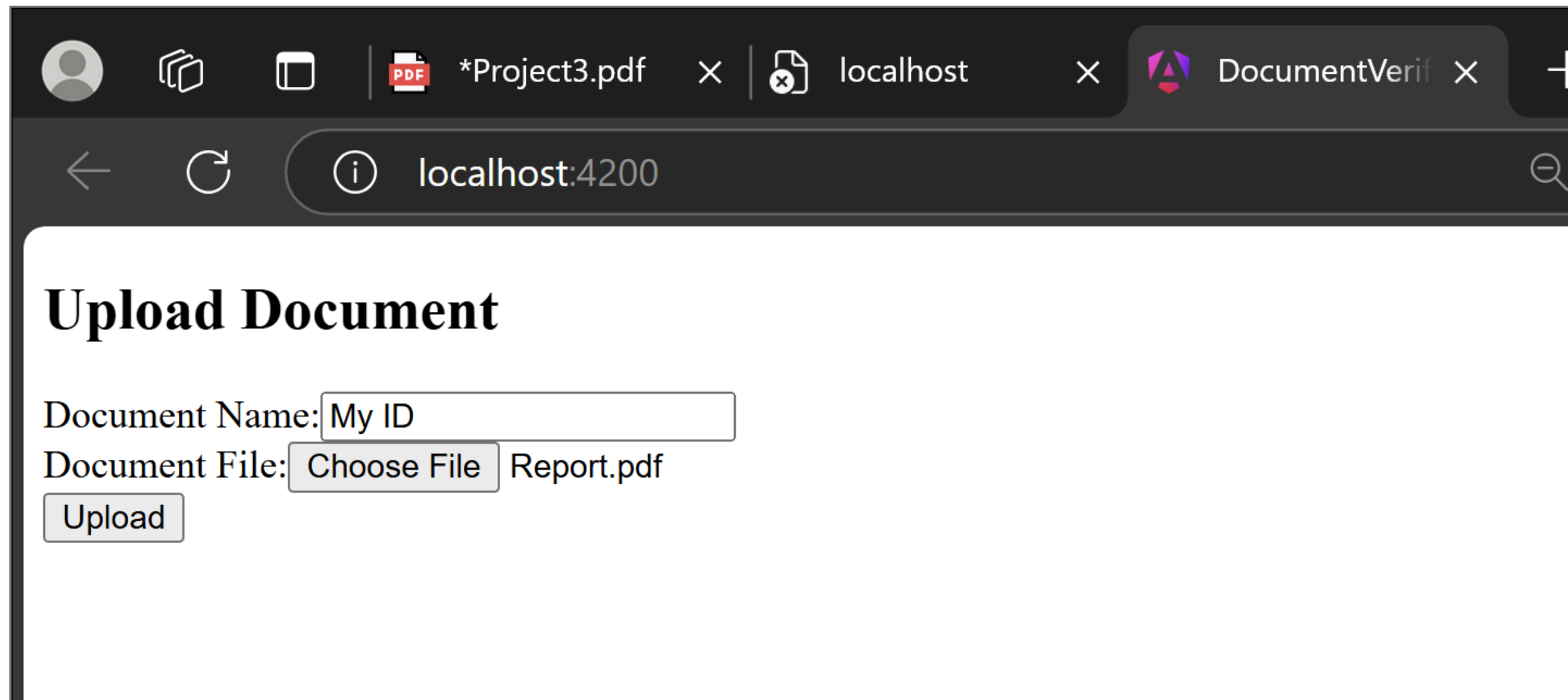
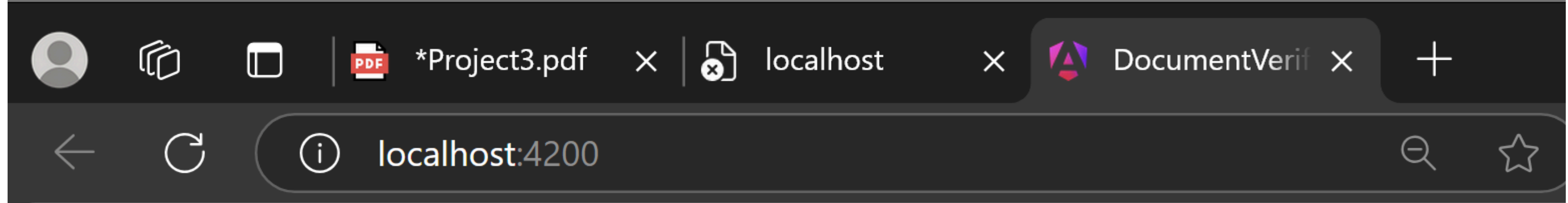
- Title: Address Proof

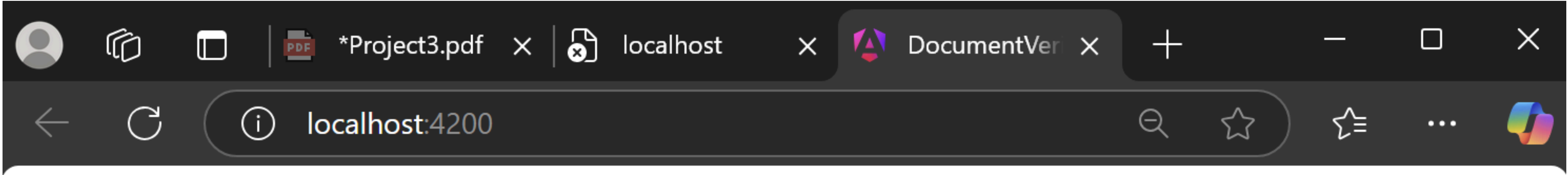
Verification Code: XYZ789

Created on: Mar 7, 2025

Status: Verified

**Create a
DocumentUploadComponent
with form validation.**





Upload Document

Document Name:

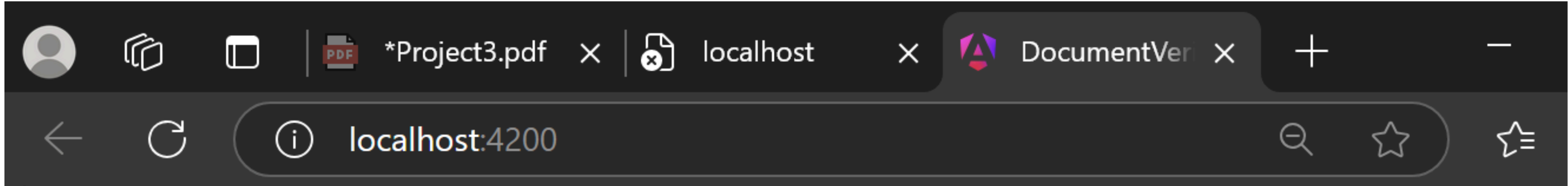
Document File: SSMS.pdf

Document uploaded successfully!



	Id	UserId	Title	FilePath	VerificationCode	Status	CreatedAt
1	1	1	Identity Proof	/documents/identity_proof.pdf	ABC123	Pending	2025-03-08 01:20:57.8809295
2	2	2	Address Proof	/documents/address_proof.pdf	XYZ789	Verified	2025-03-07 01:20:57.8818864
3	3	1	Passport	/documents/passport.pdf	24440ae0	Pending	2025-03-08 03:07:49.6146402
4	8	1	My ID	C:\Users\razan\verificationSystem\Backend\Documen...	f5dad8a8	Pending	2025-03-08 07:48:08.2956415

**Build a
VerificationComponent to
enter a VerificationCode.**



Verify Document

Document ID:

Verification Code:

Verify