**Setup Guide for PPTify Development Environment**

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**1. System Requirements**

Before you begin, ensure your system meets the following requirements:

* **Operating System**: Windows 10/11 (Recommended) or macOS/Linux with .NET support
* **.NET SDK**: Version 6.0 or higher
* **IDE**: Visual Studio 2022+ or VS Code with C# Extensions
* **Other Tools**:
  + Git (latest version)
  + Docker Desktop (optional, for containerization)

**2. Installation Steps**

Install the following tools (if not already available):

**.NET SDK**

Download and install the latest .NET SDK from: https://dotnet.microsoft.com/en-us/download

**Visual Studio**

Install Visual Studio 2022 with the following workloads:

* ASP.NET and web development
* .NET desktop development

**Or use VS Code** with the C# extension: https://marketplace.visualstudio.com/items?itemName=ms-dotnettools.csharp

**Git**

Download and install Git from: https://git-scm.com/downloads

**Docker Desktop (Optional)**

For running the app in containers: https://www.docker.com/products/docker-desktop

**3. Cloning the Repository**

Open a terminal and run the following:

git clone https://github.com/your-org/pptify.git

cd pptify

Replace the URL with the actual GitHub/GitLab repository URL.

**4. Setting Up the Solution**

Run the setup script or manually set up the solution:

**Option 1: Use CMD Script**

If setup\_structure.cmd is provided, run:

setup\_structure.cmd

This will:

* Create projects
* Add them to the solution
* Setup folder structure
* Add project references

**Option 2: Manual Setup**

Follow the steps from the Usage Guide document to manually:

* Create solution and projects
* Add projects to .sln
* Set references between layers
* Add necessary folders and placeholder files

**5. Environment Configuration**

**App Settings**

Navigate to src/Api/PPTify.Api/appsettings.json and configure necessary values:

{

"ConnectionStrings": {

"DefaultConnection": "Server=localhost;Database=PPTifyDb;Trusted\_Connection=True;"

},

"Jwt": {

"Key": "your-secret-key",

"Issuer": "PPTifyIssuer",

"Audience": "PPTifyAudience"

},

"Logging": {

"LogLevel": {

"Default": "Information",

"Microsoft.AspNetCore": "Warning"

}

}

}

You can have a separate appsettings.Development.json for local overrides.

**6. Required NuGet Packages by Layer**

**Domain**

* None (should remain pure and dependency-free)

**Application**

* MediatR
* FluentValidation

dotnet add src/Application/PPTify.Application package MediatR.Extensions.Microsoft.DependencyInjection

dotnet add src/Application/PPTify.Application package FluentValidation

**Infrastructure**

* Microsoft.EntityFrameworkCore.SqlServer
* Microsoft.EntityFrameworkCore.Tools
* Pomelo.EntityFrameworkCore.MySql (if using MySQL)
* MailKit (for email)

dotnet add src/Infrastructure/PPTify.Infrastructure package Microsoft.EntityFrameworkCore.SqlServer

dotnet add src/Infrastructure/PPTify.Infrastructure package Microsoft.EntityFrameworkCore.Tools

dotnet add src/Infrastructure/PPTify.Infrastructure package MailKit

**Shared**

* None or optional utility packages as needed (e.g. Newtonsoft.Json)

dotnet add src/Shared/PPTify.Shared package Newtonsoft.Json

**API**

* Swashbuckle.AspNetCore (Swagger)
* Microsoft.AspNetCore.Authentication.JwtBearer

dotnet add src/Api/PPTify.Api package Swashbuckle.AspNetCore

dotnet add src/Api/PPTify.Api package Microsoft.AspNetCore.Authentication.JwtBearer

**Tools (Global)**

* EF Core CLI Tools (install globally if needed)

dotnet tool install --global dotnet-ef

**7. Running the Application**

Build and run the solution using the CLI:

dotnet build PPTify.sln

dotnet run --project src/Api/PPTify.Api

Or run via **Visual Studio**:

* Set PPTify.Api as the startup project
* Press F5 to run

**Swagger UI**

Navigate to:

https://localhost:5001/swagger

To test the endpoints interactively.

**8. Troubleshooting**

|  |  |
| --- | --- |
| **Issue** | **Solution** |
| Build fails due to missing references | Re-run the reference commands or use the setup script |
| Swagger doesn't load | Ensure the project is running on https://localhost:5001 |
| EF Core migration errors | Verify your DbContext and connection string, run dotnet ef database update |
| CORS errors in frontend | Add allowed origins in Startup.cs or Program.cs configuration |

**Summary**

By following this setup guide, an individual developer can fully configure the PPTify solution on their local machine, build the project, and begin development or testing. This standard process ensures consistency across team members and environments.