

Technical Installation Manual

Debuggers Anonymous

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Introduction

This document is to help the user understand how to download and install Blue Skies onto their machine. This manual will include steps to install all prerequisites for the project, as well as to download, set up and deploy the project itself. This manual has steps to download and install Blue Skies on windows, macOS and Linux.

Our system uses Blazor for the front end and NodeJS and .NET for the backend. Our system also uses an Azure SQL database. We use Yarn to run our program.

Prerequisites

Node.js

Download [Node.js](#) and install it to your OS using the default settings.

Downloads
Latest LTS Version: **18.17.0** (includes npm 9.6.7)

Download the Node.js source code or a pre-built installer for your platform, and start developing today.

LTS
Recommended For Most Users

Current
Latest Features

Windows Installer
node-v18.17.0-x64.msi

macOS Installer
node-v18.17.0.pkg

Source Code
node-v18.17.0.tar.gz

	32-bit	64-bit
Windows Installer (.msi)		
Windows Binary (.zip)	32-bit	64-bit
macOS Installer (.pkg)	64-bit / ARM64	
macOS Binary (.tar.gz)	64-bit	ARM64
Linux Binaries (x64)	64-bit	
Linux Binaries (ARM)	ARMv7	ARMv8
Source Code	node-v18.17.0.tar.gz	

.NET

Download the [.NET](#) sdk and install it to your OS using the default settings.

Build apps - SDK

SDK 7.0.306

OS	Installers	Binaries
Linux	Package manager instructions	Arm32 Arm32 Alpine Arm64 Arm64 Alpine x64 x64 Alpine
macOS	Arm64 x64	Arm64 x64
Windows	Arm64 x64 x86 winget instructions	Arm64 x64 x86
All	dotnet-install scripts	

Visual Studio support
Visual Studio 2022 (v17.6)
Visual Studio 2022 for Mac (v17.6)

Included in
Visual Studio 17.6.5

Included runtimes
.NET Runtime 7.0.9
ASP.NET Core Runtime 7.0.9
.NET Desktop Runtime 7.0.9

Language support
C# 11.0
F# 7.0
Visual Basic 16.9

SDK 7.0.109

Run apps - Runtime

ASP.NET Core Runtime 7.0.9

The ASP.NET Core Runtime enables you to run existing web/server applications. **On Windows, we recommend installing the Hosting Bundle, which includes the .NET Runtime and IIS support.**

IIS runtime support (ASP.NET Core Module v2)
17.0.23172.9

OS	Installers	Binaries
Linux	Package manager instructions	Arm32 Arm32 Alpine Arm64 Arm64 Alpine x64 x64 Alpine
macOS		Arm64 x64
Windows	Hosting Bundle x64 x86 winget instructions	Arm64 x64 x86

.NET Desktop Runtime 7.0.9

The .NET Desktop Runtime enables you to run existing Windows desktop applications. **This release includes the .NET Runtime; you don't need to install it separately.**

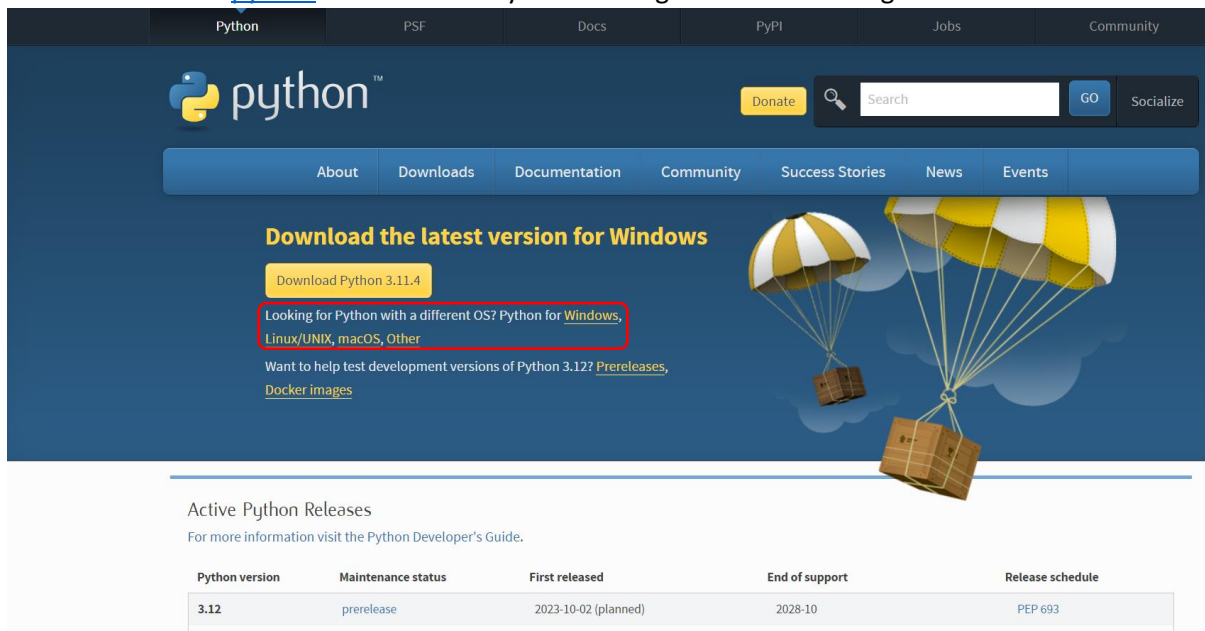
OS	Installers	Binaries
Windows	Arm64 x64 x86 winget instructions	

.NET Runtime 7.0.9

The .NET Runtime contains just the components needed to run a console app. Typically, you'd also install either the ASP.NET Core Runtime or .NET Desktop Runtime.

Python

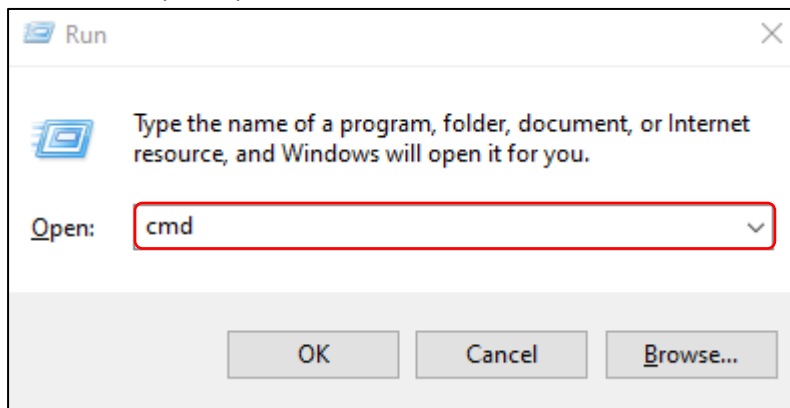
Download [python](#) and install it to your OS using the default settings.



Yarn

Windows

1. Open the command prompt by pressing Windows logo key + r '⊞ + R' to open the "run program or file" window.
2. This should open a panel that looks like this. Enter 'cmd' in the text box and click on 'Ok'



3. Download yarn by running the command 'npm install --global yarn'
`>npm install --global yarn`

Ubuntu

1. Press 'ctrl+alt+T' to open a terminal
2. Enter '`cd path/to/Blue-Skies-main/src/`'
`$ cd Downloads/Blue-Skies-main/src/`
3. Enter the command '`sudo apt-get install yarn`' to install yarn
`/Blue-Skies-main/src$ sudo apt-get install yarn`

MacOS

1. Press cmd + space (cmd + ' ') And search for terminal
2. Change the directory to Blue-Skies-main/src by entering the command '*cd path/to/Blue-Skies-main/src*'.
3. Run the command '*yarn*' in this directory to install yarn

Installation

1. Go to [Blue Skies](#) on GitHub.
2. Make sure you are on the main branch.

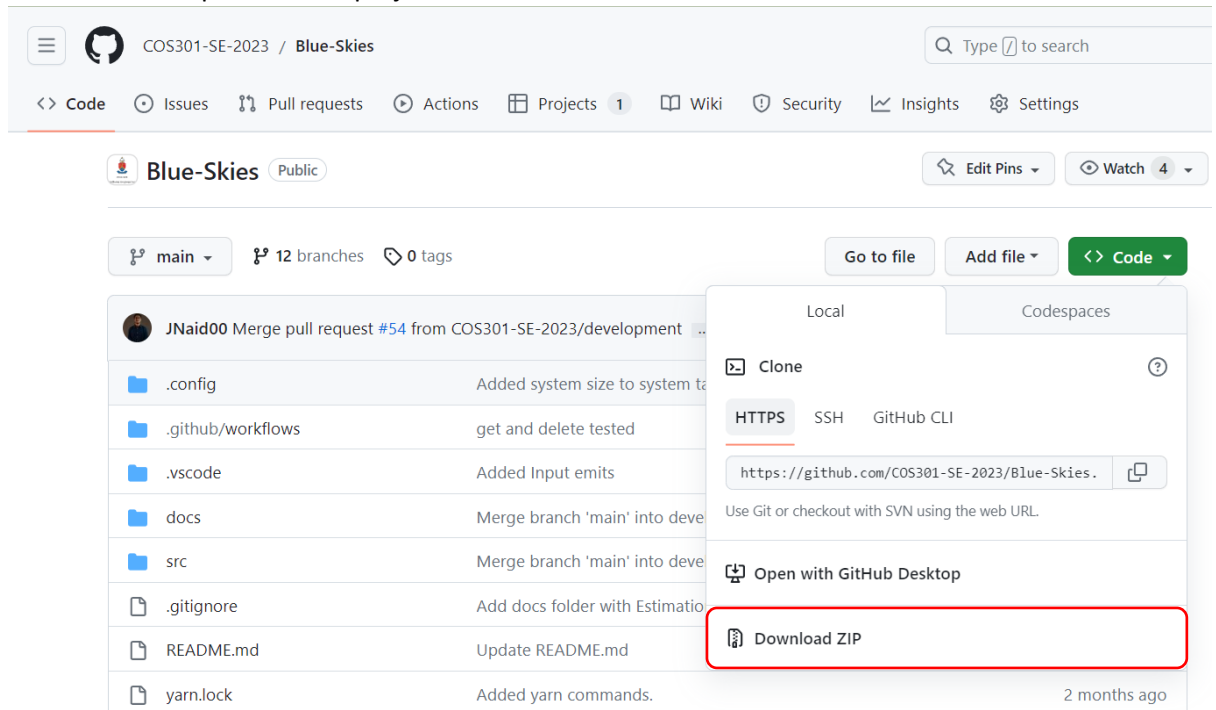
The screenshot shows the GitHub repository page for 'Blue-Skies' (Public). The repository is owned by 'COS301-SE-2023'. The 'main' branch is selected, showing 12 branches and 0 tags. The commit history table is visible below the branch selection.

Commit	Message	Time
JNaid00 Merge pull request #54 from COS301-SE-2023/development		last week
c627338		last week
616		commits
.config	Added system size to system table	last month
.github/workflows	get and delete tested	last month
.vscode	Added Input emits	last month
docs	Merge branch 'main' into development	last week
src	Merge branch 'main' into development	last week
.gitignore	Add docs folder with Estimation and resources and risk document	2 months ago
README.md	Update README.md	last month
yarn.lock	Added yarn commands.	2 months ago

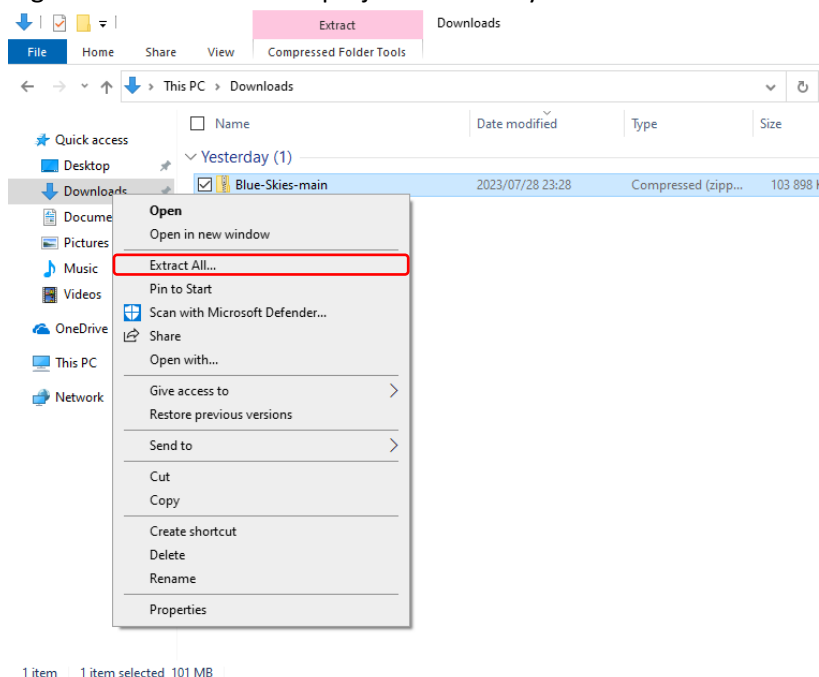
3. Click on the code button.

This screenshot is identical to the previous one, but the 'Code' button in the top right corner of the repository view is highlighted with a red border, indicating the next step in the installation process.

4. Download the zip file for the project



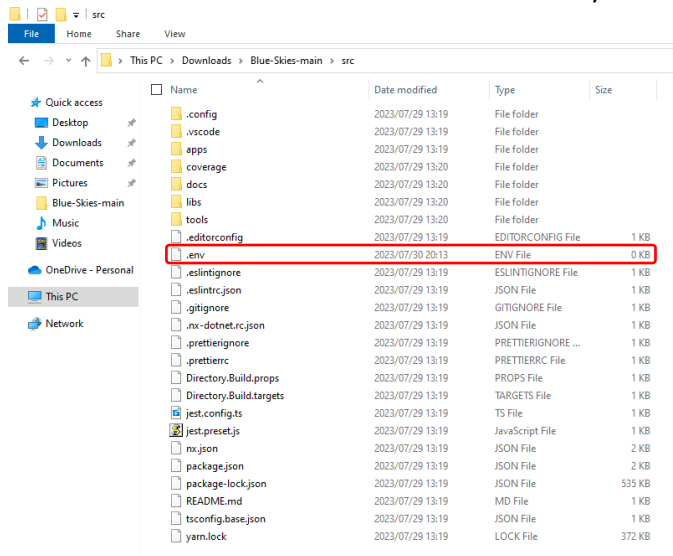
5. Right click and extract the project to where you want to save it.



6. The next steps will show what to do after the project has been extracted.

.ENV file

- You will need to add a .env file to the src directory of the project.



- Fill in the .env file which has the following credentials:

```

AZURE_SQL_SERVER= {1}
AZURE_SQL_USER= {2}
AZURE_SQL_PASSWORD= {3}
AZURE_SQL_DB= {4}
TYPE=service_account
PRIVATE_KEY= {5}
CLIENT_EMAIL= {6}
PROJECT_ID= {7}
PRIVATE_KEY_ID= {8}
CLIENT_ID= {9}
AUTH_URI= {10}
TOKEN_URI= {11}
AUTH_PROVIDER_X509_CERT_URL= {12}
CLIENT_X509_CERT_URL= {13}
UNIVERSE_DOMAIN=googleapis.com
MAP_BOX_API_KEY= {14}
API_PORT= http://localhost:5096
GOOGLE_API_KEY= {15}

```

- You can find links to get all these credentials from the following table:

{1}-{4}	Azure	Go to Azure , create an account and database. Fill in the credentials with the necessary information afterwards
{5}-{13}	Google Earth Engine	Go to Google Earth Engine , create an account and fill in the credentials in the .env file
{14}-{15}	Google Maps	Go to Google Maps Platforms and create an API key

10. Open a new console and run the command:
'cd path/to/Blue-Skies-main/src'
And then run:
'npm install' to install all dependencies to the project.
11. In the same console, run the command *'yarn install'*.

Deployment/Running

1. Open 4 new terminals/command prompts and enter the command `'cd path/to/Blue-Skies-main/src'` in each of them.
2. In each of the consoles, run the commands:
 - a. `'yarn start:express,'`
 - b. `'yarn start:api,'`
 - c. `'yarn start:app,'`
 - d. `'yarn start:tailwind'`

These commands will then run the project on your machine.