



**DOCUMENT
ENGINEERING**

CMPSC 104 – Document Engineering

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ALLEGHENY COLLEGE

jeekyll

What is jekyll?

- Jekyll is a static site generator (ssg) that converts plain text into static websites and blogs.
- It uses simple, human-readable languages like **Markdown** to generate HTML.
- Jekyll integrates seamlessly with **GitHub Pages** for free hosting.

Why?

- Ideal for creating static websites without needing a database or server-side code.
- **Easy to Use:** we can use **markdown** only without knowledge about html, css or javascript.
- **Version Control Friendly:** works well with Git and GitHub, allowing developers to collaborate, track changes, and manage deployments efficiently.

Installation

Installing Ruby and RubyGems

- **Ruby:** Jekyll is built with Ruby, so you need it to run Jekyll and manage your static site.
- **RubyGems:**
 - Package manager of ruby that allows us to install, update, and maintain Ruby programs (called gems).
 - We'll use it to install and manage Jekyll and its dependencies, such as Bundler

Installation for MacOS

- MacOS comes with **Ruby** and **RubyGems** pre-installed.
- Check the versions already available on your system. (run ***ruby -v*** in terminal)

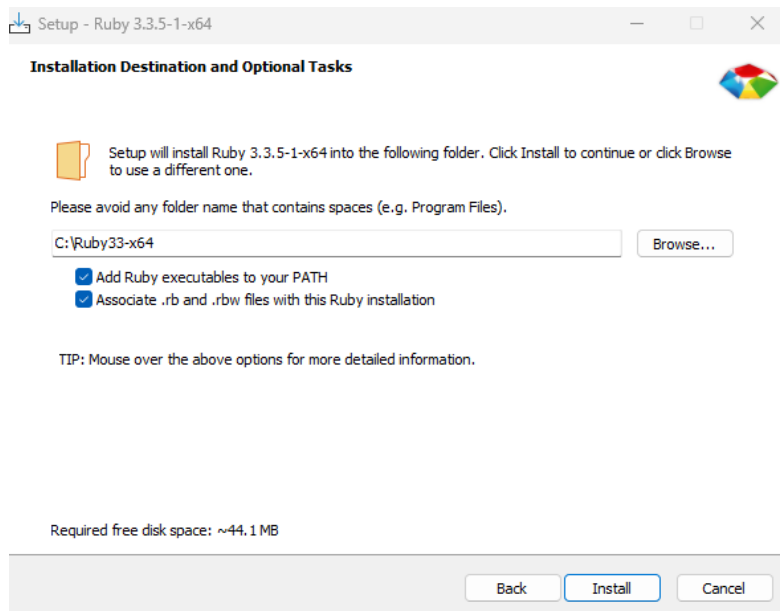
Installation for MacOS

If your Ruby version is too old (e.g., Ruby 2.x), proceed with the following steps to update Ruby.

- Check if Homebrew is Installed. (run ***brew -v*** in terminal)
- If not installed, install Homebrew using:
/bin/bash -c "\$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
- Check if rbenv is Installed. (run ***rbenv -v*** in terminal)
- If not installed, use Homebrew to install rbenv: ***brew install rbenv***
- Install Ruby 3.3.5 with rbenv, run the following commands in terminal:
 - ***rbenv init***
 - ***rbenv install 3.3.5***
 - ***rbenv global 3.3.5***
 - ***ruby -v***
- Install Jekyll and Bundler: ***gem install jekyll bundler***

Installation for Windows

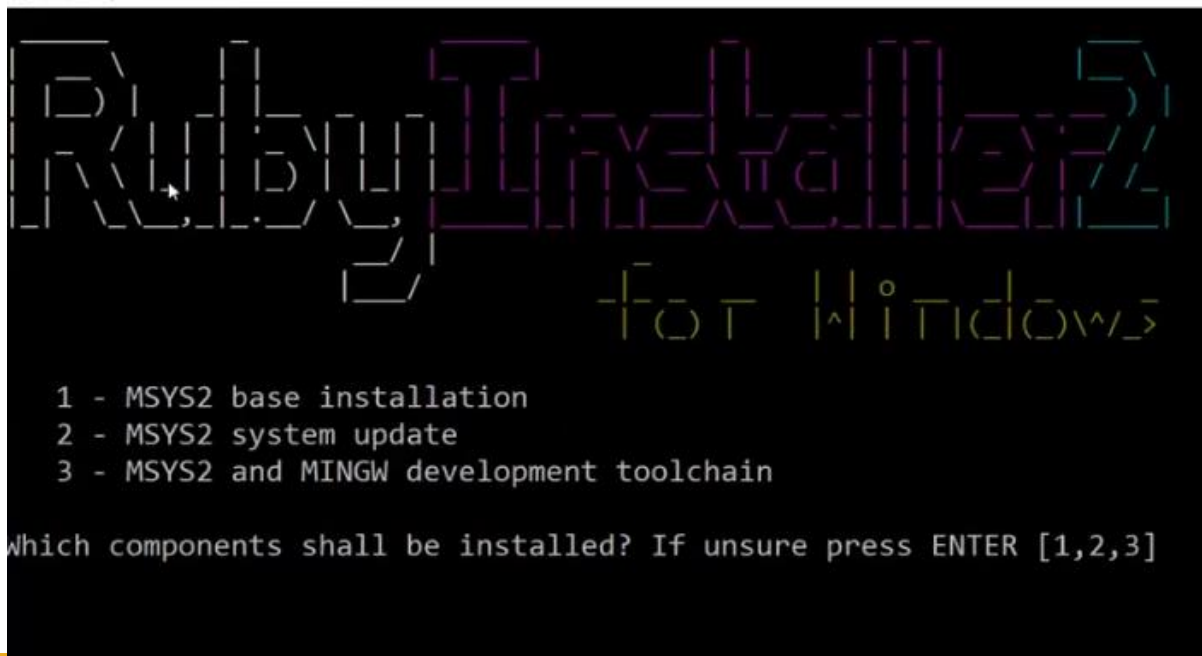
Download and install Ruby +Devkit 3.3.5 Version: [Downloads \(rubyinstaller.org\)](https://rubyinstaller.org/downloads)



☒ Run 'ridk install' to install MSYS2 and development toolchain.
MSYS2 is required to install gems with C extensions.

Installation for Windows: Setting Up MSYS2

After Ruby installation, it will prompt you to install MSYS2



MSYS2 64bit Setup

Completing the MSYS2 64bit Wizard

Click Finish to exit the MSYS2 64bit Wizard.

☐ Run MSYS2 64bit now.

Fixing Ruby Installation Issues on Windows

Step 1: Uninstall the Incorrect Ruby Installation

- Navigate to Control Panel > Programs > Programs and Features.
- Look for Ruby +Devkit 3.3.5 in the list of installed programs.
- Right-click on Ruby and select Uninstall.
- Follow the prompts to fully remove Ruby from the system.

Step 2: Verify Ruby is Completely Removed: ***ruby -v***

- If Ruby was removed, you should see an error message or no version number returned.

Installation for Windows

Install Jekyll and Bundler Gems:

After setting up Ruby and MSYS2, open cmd and run: *gem install jekyll bundler*

Create and Serve a Jekyll Site

Create a new Jekyll project:

- `jekyll new my-awesome-site`
- `cd my-awesome-site`
- `bundle exec jekyll serve`

Hosting Your Jekyll Site on GitHub Pages

Step1: Create a GitHub Repository & Push Your Jekyll Site to GitHub

- `cd my-site`
- Add */my-site* to the **baseurl** field in your **_config.yml** file.
- `git init`
- `git checkout -b gh-pages`
- `git add .`
- `git commit -m "Initial commit for Jekyll site"`
- `git remote add origin https://github.com/your-username/your-repo-name.git`
- `git push -u origin gh-pages`

Hosting Your Jekyll Site on GitHub Pages

Step2: Enable GitHub Pages for gh-pages Branch

- Go to the repository settings
- Scroll to GitHub Pages section:
 - In the "Pages" section, under Source, select "Deploy from a Branch".
 - Under Branch, select the *gh-pages* branch as the source branch, and set the folder to /root if all your site files are in the root directory.
- GitHub Pages will deploy your Jekyll site automatically.