



**DOCUMENT  
ENGINEERING**

# CMPSC 104 – Document Engineering

Prof. Hang Zhao



ALLEGHENY COLLEGE

# jeekyll

## What is jeekyll?

- Jeekyll 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.
- Jeekyll 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)

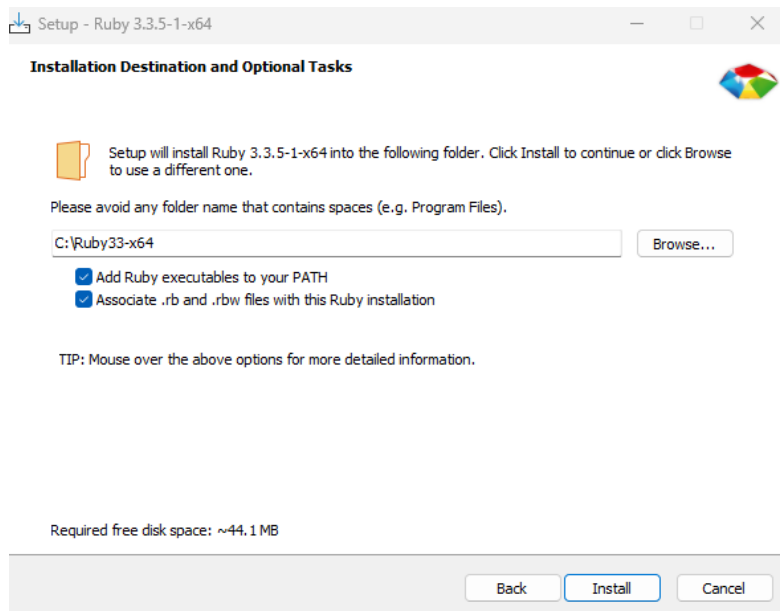
# Installation for MacOS

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

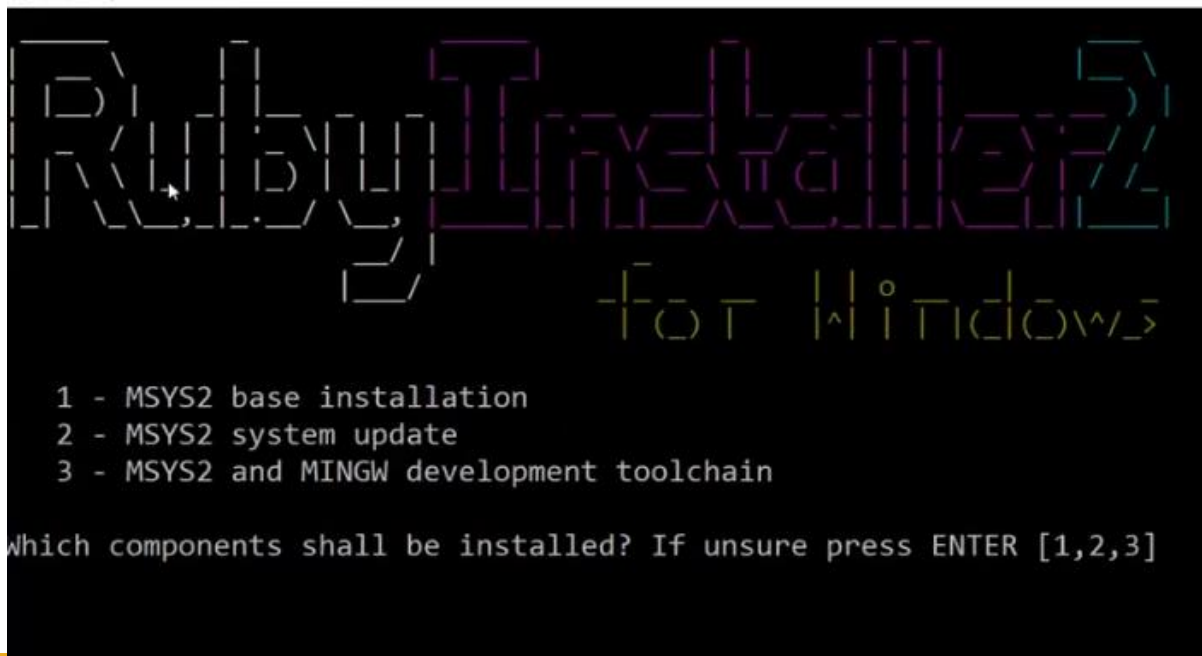
Download and install Ruby+Devkit 3.3.5 Version: [Downloads \(rubyinstaller.org\)](https://rubyinstaller.org/downloads)



☒ 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.

# 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`