








# Prework

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## 1. Download and Install the Software

Before the workshop, make sure you can open **R** and **RStudio** on your computer.

- From **FWS Apps-To-Go**, install:
  - R 4.4.2 or newer
  - RStudio 2024.09.1 or newer

### Check Your Versions

- In RStudio, go to **Help** → **About RStudio** to confirm your version.
- In the R console, type:

```
R.version.string
```

If your versions are older, please update them.

Once installed, open RStudio to make sure it launches without errors.

## 2. Understanding RStudio Projects (for newer R users)

We will work inside an **RStudio Project**, which is like a self-contained folder that keeps all your files and code organized.

- An R Project keeps track of your working directory.
- All the files for this workshop will live inside one project folder.
- When you open the project, RStudio automatically sets that folder as your “home base.”

### Why Projects Matter

Think of an R Project as a **container** for your work. Instead of scattering files across your computer, everything you need is in one place.

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## 3. Download the Exercise Materials

Open RStudio and run this in the Console:

```
if (!require("usethis")) install.packages("usethis")
usethis::use_course("https://github.com/USFWS/intro-to-quarto-exercises/
archive/refs/heads/main.zip")
```

### What Happens Next

- RStudio may prompt you to open the new project folder — click **Yes**.
  - You should now see the RStudio title bar say: intro-to-quarto-exercises-main.
  - If not, find the intro-to-quarto-exercises-main folder and double-click the .Rproj file.
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## 4. Install R Package Dependencies

With the project open, run:

```
source("install_packages.R")
```

### This May Take Time

The first time you install packages, it may take several minutes. Make sure you're connected to the internet.

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## 5. Install TinyTeX (for PDFs)

To render Quarto documents as a PDF, you'll need LaTeX.

Run:

```
tinytex::install_tinytex()
```

### Good to Know

You only need to install TinyTeX once. If you already have LaTeX, you can skip this step.

## 6. Check Your Setup

Before the workshop, confirm:

- ☐ You can open RStudio without errors.
- ☐ You can open the **intro-to-quarto-exercises-main** project.
- ☐ Packages install without errors.
- ☐ Quarto works — run:

```
quarto::quarto_check()
```

## 7. Pework Assignment (Submit Before the Workshop)

**Goal:** Confirm your setup works end-to-end by rendering a Quarto document.

1. In RStudio (with the `intro-to-quarto-exercises-main` project open):
  - Go to **File** → **New File** → **Quarto Document...**
  - Choose **HTML** format and title it “Pework Check”.
2. Replace the starter text with:

```
# Hello Quarto!

- **Name:** YOUR NAME
- **Fun fact:** FUN FACT ABOUT YOU

```.r}
#| echo: true
#| message: false
#| warning: false
sessionInfo()
```\n
```

3. Click **Render** to create the HTML output.
4. (Optional) Also render to PDF:
  - In the YAML header, add `format: pdf`.
  - Render again to produce a PDF.

### What to Submit

- The rendered **HTML** file (and PDF if you tried it).
- A **screenshot of RStudio** showing:
  - The project name `intro-to-quarto-exercises-main` in the title bar.
  - The rendered output in the Viewer/Preview pane.

### Pass Criteria

- HTML renders successfully (no errors).
- If attempted, PDF renders successfully.
- Screenshot clearly shows the correct project open.