

# Tech Setup Challenge

## Getting Started with Your Analytics Toolkit

### Tech Setup Challenge - Quick Start Guide

#### Challenge Overview

This challenge will get you set up with all the essential tools for BUAD 442. You'll learn to use modern development tools that are standard in the analytics industry.

#### Part 1: Core Tools Setup

##### 1. Cursor AI Setup

- Go to [cursor.com/students](https://cursor.com/students)
- Sign up with your **udel.edu email** (free for students! )
- Download and install Cursor AI
- Install the **GitHub Pull Requests** extension in Cursor

##### 2. GitHub Account

- Create account at [github.com](https://github.com) (if you don't have one)
- Use your **udel.edu email** for consistency

##### 3. Get Course Materials

**Option A - Clone in Cursor:** - Open Cursor AI - Press **Ctrl+Shift+P** → “Git: Clone” - Paste: <https://github.com/flyaflya/buad442Fall2025> - Choose where to save locally

**Option B - Download ZIP:** - Go to [course repo](#) - Click green “Code” button → “Download ZIP” - Extract to your preferred folder

#### 4. Create Your Student Folder

- Navigate to `challenges/01-Tech-Setup-Challenge/student-submissions/`
- Create new folder: `YourFirstName` (e.g., `JohnD`)
- Copy `AdamF/submission.md` to your folder
- Edit `submission.md` with your info:

```
# Your Name
- **Major:** Your Major
- **Year:** Junior/Senior/etc.
- **Goals:** What you hope to learn
- **Experience:** Any relevant background
```

#### 5. Submit via Pull Request

**In Cursor AI:** - Stage your changes: `Ctrl+Shift+G` → click “+” next to your new folder - Commit: Write message like “Add student submission for [YourName]” - Push: Click “Sync Changes” or “Publish Branch” - Create PR: Click “Create Pull Request” when prompted

**Alternative - GitHub Web:** - Go to your forked repo on GitHub - Click “Compare & pull request” - Add description: “Student submission for [YourName]” - Submit!

### Part 2: Quarto Setup

#### Why Quarto?

Quarto is essential for creating **professional reports** that combine: - **Text** (like this document) - **Code** (Python/R analysis) - **Visualizations** (charts, graphs) - **Interactive elements** (dashboards)

It’s not just for code - it’s for creating beautiful, reproducible documents that are perfect for business presentations and reports.

#### 6. Install Quarto

- Go to [quarto.org/docs/get-started/](https://quarto.org/docs/get-started/)
- Download and install Quarto for your operating system
- Verify installation: Open terminal/command prompt and type `quarto --version`

## 7. Test Quarto

Create a simple test document: 1. Create a new file called `test.qmd` 2. Add this content:  
“‘markdown — title: “My First Quarto Document” format: html —

# Hello World!

This is my first Quarto document. “3. **Render it:**quarto render test.qmd← **Note:** specific file name 4. Open the generatedtest.html’ file

## 8. Create Your First Report

- Navigate to your student folder
- Create a new file: `my-first-report.qmd`
- Write a brief report about your tech setup experience
- Include sections for:
  - Tools installed
  - Challenges encountered
  - What you learned
- Render to HTML and PDF formats

## Quick Git Basics

- **Commit** = Save your changes
- **Push** = Upload to GitHub
- **Pull Request** = Request to add your changes to main repo
- **Fork** = Your copy of the repo

## Submission Checklist

- ☐ Cursor AI installed and configured
- ☐ GitHub account created
- ☐ Course materials downloaded
- ☐ Student folder created with submission.md
- ☐ Pull request submitted
- ☐ Quarto installed and tested
- ☐ First Quarto report created

## Need Help?

- GitHub tutorials: [guides.github.com](https://guides.github.com)
- Quarto docs: [quarto.org/docs](https://quarto.org/docs)
- Cursor AI has built-in help and AI assistance
- Ask questions in class or office hours!

**Total time to complete:** ~45 minutes

---

## Why These Tools Matter

### In the Real World:

- **GitHub** = Industry standard for collaboration
- **Cursor AI** = Modern AI-assisted development
- **Quarto** = Professional reporting and documentation
- **Git** = Version control (essential for any coding project)

### For This Course:

- **Challenges** will require Quarto reports
- **Portfolio** will be built on GitHub
- **Presentations** will use Quarto slides
- **Collaboration** will happen through GitHub

You're learning tools that are used by data scientists, analysts, and developers worldwide!