To create a basic Next.js project for your assignment, follow these simplified steps. This will guide you through setting up a new Next.js application using Node.js and npm (Node Package Manager), which are prerequisites for running and managing Next.js projects.  
  
**Creating Your First Next.js Project: Assignment Description**  
  
**Objective:**  
Learn how to set up a basic Next.js project from scratch. This assignment will introduce you to the initial steps required to create a Next.js application, including environment setup and project creation.  
  
**Prerequisites:**

* Make sure you have Node.js installed on your computer. You can download it from [nodejs.org](<https://nodejs.org/>).
* Basic familiarity with terminal or command prompt commands.

**Assignment Steps:**  
  
1.**Open Your Terminal or Command Prompt:**

* On Windows, you can search for "Command Prompt"  in the Start menu.
* On macOS or Linux, open the "Terminal" application.

2. **Create a New Next.js Project:**

* Run the following command in your terminal to create a new Next.js application named "my-next-project". You can replace "my-next-project" with any name you prefer for your project.  
    
            npx create-next-app@latest my-next-project
* This command uses `npx`, which is a package runner tool that comes with npm, to run the `create-next-app` command without needing to install it globally on your machine.

3. **Navigate to Your Project Directory:**  
    Change into your new project's directory with:  
      
            cd my-next-project  
       
  
4. **Start the Development Server:**

* Inside your project directory, start the development server by running:  
    
       npm run dev
* This command starts a local development server on [[http://localhost:3000](http://localhost:3000).](http://localhost:3000](http/localhost:3000).) Open this URL in your web browser to see your new Next.js project running.

5. **Explore Your Next.js Project:**  
    You can now begin to explore the Next.js project structure. Check the `app` directory for the default index page and try editing the `src/app/page.ts` file. Save your changes and refresh your browser to see the updates in real-time.  
  
  
**Reading/Writing Assignment: Exploring Next.js 14 and Understanding Core Concepts in Web DevelopmentPart A: Next.js 14 Features**

* Your task is to research Next.js 14 and list down all its new features and improvements. Provide a brief explanation for each feature listed, focusing on how it contributes to enhancing the development experience or application performance.

Part B: Understanding Libraries and Frameworks

* Write a short essay (200-300 words) on the difference between a library and a framework. Use examples to illustrate your points and explain how the control flow differs between the two.

Part C: Introduction to React.js

* In your own words, describe what React.js is and its significance in web development. Discuss its main features, such as the virtual DOM, component-based architecture, and JSX. Explain why React.js is popular among developers and how it differs from traditional JavaScript libraries and frameworks.

**Submission Requirements:**

* **Project Name:**  Ensure your project has a unique name.
* **Screenshot:** Include a screenshot of your running application
* **Code Submission:** Submit your project code by github link
* Submit your responses in a typed document, either as a PDF or Word file. (Online Word file link)

**Evaluation Criteria:**

* **Correct Setup:** The project is set up correctly and runs without errors.
* **Custom Page Creation:** At least one custom page has been added and is accessible.
* **Understanding:** The submission shows an understanding of basic Next.js project structure and navigation between pages.