

Laboratory 2: Creating an Email Sender with Node.js

Objective:

Create a simple email sender application using Node.js and a popular email sending library (such as Nodemailer).

Prerequisites:

- Basic understanding of Node.js.
- Node.js installed on your machine.
- A code editor (e.g., Visual Studio Code).

Tasks:

Setup Node.js Project:

- Create a new folder for your project.
- Open a terminal and navigate to the project folder.
- Initialize a new Node.js project using `npm init`.

Install Nodemailer:

Use `npm install nodemailer` to install the Nodemailer library.

Create Main Application File (app.js):

- Set up a basic Node.js script (`app.js`) to include the necessary Nodemailer code.
- Import the Nodemailer library.
- Set up a basic email configuration (e.g., SMTP details).

Implement Email Sending Functionality:

- Write a function that uses Nodemailer to send an email.
- Include parameters such as the recipient's email address, subject, and message body.

Test Email Sending:

- Call the email sending function with sample data.
- Run the script and verify that the email is sent successfully.

Enhance the Application:

- Add error handling to your code.
- Allow users to input email details through the command line or a simple form.
- Explore and implement additional features offered by Nodemailer.

Document the Code:

- Add comments to explain your code.
- Write a brief documentation (in ReadMe file) describing how to use your email sender application.

Submission:

- Submit your code along with any documentation (rar).
- Provide a brief summary of the challenges faced and lessons learned during the implementation.

Additional Challenges (Bonus (within 100%)):

- Explore using environmental variables for sensitive information.
- Implement email templates for more complex email content.
- Deploy your application on a cloud platform like Heroku.

Conclusion:

By completing this laboratory work, you should have a basic understanding of using Node.js and Nodemailer to create a simple email sender. This can serve as a foundation for more advanced email-related projects and back-end development tasks.