

Standard Operating Procedure (SOP)

Installing Node.js and NPM

Purpose

Provide executable, verified steps including terminal commands and validation checks.

Detailed Procedure

Follow commands in sequence. Do not skip validation between steps. Run commands inside a terminal with required permissions.

Commands to Execute

```
node -v
```

```
npm -v
```

```
nvm install --lts
```

```
nvm use --lts
```

Section 1: Deep Explanation

What the command does and why it is necessary.

Expected console output and common variations.

What to do if the command fails or hangs.

How to revert safely if something breaks.

Section 2: Deep Explanation

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Section 3: Deep Explanation

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Section 4: Deep Explanation

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Section 5: Deep Explanation

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Expected console output and common variations.

What to do if the command fails or hangs.

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Section 6: Deep Explanation

What the command does and why it is necessary.

Expected console output and common variations.

What to do if the command fails or hangs.

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Section 7: Deep Explanation

What the command does and why it is necessary.

Expected console output and common variations.

What to do if the command fails or hangs.

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Section 8: Deep Explanation

What the command does and why it is necessary.

Expected console output and common variations.

What to do if the command fails or hangs.

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Section 9: Deep Explanation

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Troubleshooting

Check internet connectivity.

Verify permissions and environment variables.

Reinstall dependencies when version conflicts appear.

Validation Checklist

Open the application in browser or Postman.

Verify logs contain no fatal errors.

Confirm builds and deployments are reproducible.