

Day2_Project_Folder_Setup_Script_EN

Mini-lab: Project Folder Setup Script

Automate the creation of a folder and file structure for a new project.

Project structure

```
my_test_project
├── configs
├── logs
├── README.md
└── scripts
```

Steps

1. Create bash script `setup_project.sh`.
2. Accept project name as an argument (`$1`).
3. Create folders `scripts`, `configs`, `logs`.
4. Create empty `README.md` в корне проекта. / in the project root.
5. Display success message.

```
GNU nano 7.2                                setup_project.sh
#!/usr/bin/bash

#Check argument

if [ -z "$1" ]; then
    echo "Usage: $0 project_name"
    exit 1
fi

PROJECT_NAME=$1

mkdir -p $PROJECT_NAME/{scripts,configs,logs}

touch $PROJECT_NAME/README.md

echo "Project structure for '$PROJECT_NAME' created successfully!"
```

- **if** — condition.
- `[...]` — built-in command `test` .
- `z "$1"` — checks if the variable `$1` is an **empty string**.
- If it is empty — enter `then` .
- `echo` prints an instruction on how to run the script.
- `$0` — the name of the current script (`/setup_project.sh`).
- `exit 1` — exit with error code 1.
- End of condition `fi` .
- Save the first argument passed at startup into the variable `PROJECT_NAME` .
- `mkdir` — create a directory.
- `p` — create parent directories.
- `{scripts,configs,logs}` — bash **brace expansion** — will create **three** subdirectories inside `$PROJECT_NAME` .
- Creates an empty file `README.md` in the project folder.
- Prints a message that everything completed successfully.

Useful

- `$0` — the name of the script itself.
- `$1` — the first argument, `$2` — the second.
- Quotes around `$1` are required so the script doesn't break if the variable is empty or contains spaces.

Practice

1. Create file `setup_project.sh` и вставь код.

2. Make it executable:

```
chmod +x setup_project.sh
```

3. Run:

```
./setup_project.sh my_test_project
```

4. Check the created structure:

```
tree my_test_project
```

```
leprecha@Ubuntu-DevOps:~$ tree my_test_project
my_test_project
```

```
|—configs  
|—logs  
|—README.md  
└—scripts
```

3 directories, 1 file