

## **Defined Departments and their Responsibilities**

### **1. Executives**

They have a role of shaping strategy and overseeing today's operations, finance, IT, security, and overall direction.

### **2. Human Resources**

This department handles recruiting, onboarding, payroll, performance reviews, policies, and employee relations.

### **3. Finance and Accounting**

They manage budgeting, accounting, financial control, tax compliance, and billing.

### **4. Engineering**

This department is focused on software development, backend systems, deployment, and continuous integration/delivery.

### **5. Marketing**

This department is focused on branding, content, market insights, social campaigns, and overall external messaging.

### **6. Information Technology (IT)**

They are responsible for infrastructure, networks, end-user support, system admin, and backups.

**Table of User Roles and Access Levels**

User Role	Access Level
Junior Software Developer	Limited Development Access
Software Engineer	Development Access
Senior Software Engineer	Full Development Access
Backend Developer	Backend Access Only
DevOps Engineer	Full DevOps Access
HR Assistant	Limited HR Access
HR Business Partner	Full HR Access
Payroll Manager	Payroll Access
HR Intern	Restricted HR Access

Performance Analyst	Analytics & Reports Access
Accountant	General Finance Access
Budget Analyst	Budget Planning Access
Financial Controller	Full Finance Access
Tax Advisor	Tax & Compliance Access
Billing Clerk	Billing Access Only
Content Strategist	Content Management Access
Social Media Analyst	Social Media Tools Access
Market Researcher	Research Data Access
Creative Designer	Design Tools Access
Brand Manager	Full Marketing Access
System Administrator	Full IT Access
Network Engineer	Network Access
Helpdesk Support	User Support Access
IT Intern	Limited IT Access
Backup Specialist	Backup & Restore Access
Chief Executive Officer	Full System Access
Chief Information Officer	Full IT Oversight Access
Chief Security Officer	Security & Compliance Access
Chief Operating Officer	Operational Oversight Access
Chief Financial Officer	Full Financial Oversight

### Directory and File Structure

/cybershield/

```

  └── engineering/
      ├── backend/
      ├── frontend/
      ├── deployments/
      ├── devops/
          └── scripts/
          └── configs/
  
```

```

    hr/
      records/
      payroll/

    finance/
      reports/
      budgets/
      tax/
      billing/

    marketing/
      content/
      social_media/
      research/
      designs/
      brand/

    it/
      backups/
      helpdesk/
      network/

    executives/
      strategy/
      board_reports/

    shared/
      policies/
      announcements/

```

**Table Mapping Users to Roles and Permissions**

Name	Username	General Role	Department Tag	Permission
Alice U.	alice_eng	Junior Software Developer	Engineering	Modify Privilege
Dave B.	dave_eng	DevOps Engineer	Engineering	Full Privilege
Jude M.	jude_eng	Senior Software Engineer	Engineering	Full Privilege

Kelly T.	kelly_eng	Software Engineer	Engineering	Modify Privilege
Fatima O.	fatima_eng	Backend Developer	Engineering	Modify Privilege
Bob K.	bob_hr	HR Assistant	HR	Read Only Privilege
Susan H.	susan_hr	HR Business Partner	HR	Modify Privilege
Moses A.	moses_hr	Payroll Manager	HR	Modify Privilege
Tim I.	tim_hr	HR Intern	HR	Read Only Privilege
Tolu B.	tolu_hr	Performance Analyst	HR	Read Only Privilege
John C.	john_fin	Accountant	Finance	Modify Privilege
Clara N.	clara_fin	Budget Analyst	Finance	Modify Privilege
Stephen Y.	stephen_fin	Financial Controller	Finance	Full Privilege
Kemi R.	kemi_fin	Tax Advisor	Finance	Modify Privilege
Chi N.	chi_fin	Billing Clerk	Finance	Modify Privilege
Francis G.	francis_mark	Content Strategist	Marketing	Modify Privilege
Rita M.	rita_mark	Social Media Analyst	Marketing	Modify Privilege
Lukman T.	lukman_mark	Market Researcher	Marketing	Read Only Privilege
Tom B.	tom_mark	Creative Designer	Marketing	Modify Privilege
Farida S.	farida_mark	Brand Manager	Marketing	Modify Privilege
Damilola H.	damilola_it	System Administrator	IT	Full Privilege
Yusuf I.	yusuf_it	Network Engineer	IT	Modify Privilege
Zainab L.	zainab_it	Helpdesk Support	IT	Modify Privilege
Kevin O.	kevin_it	IT Intern	IT	Read Only Privilege
Bolu A.	bolu_it	Backup Specialist	IT	Modify Privilege
Jane A.	jane_exec	Chief Executive Officer	Executive	Full Privilege

Ken D.	ken_exec	Chief Information Officer	Executive	Full Privilege
Lola Y.	lola_exec	Chief Security Officer	Executive	Full Privilege
Dayo S.	dayo_exec	Chief Operating Officer	Executive	Full Privilege
Fola O.	fola_exec	Chief Financial Officer	Executive	Full Privilege

## Script to Implement Setup From Scratch

# Create a directory structure

- mkdir -p /cybershield/{"engineering/backend, engineering/frontend, engineering/deployments, engineering/devops/scripts, engineering/devops/configs"}
- mkdir -p /cybershield/{"hr/records, hr/payroll"}
- mkdir -p /cybershield/{"finance/reports, finance/budgets, finance/tax, finance/billing"}
- mkdir -p /cybershield/{"marketing/content, marketing/social\_media, marketing/research, marketing/designs, marketing/brand"}
- mkdir -p /cybershield/{"it/backups, it/helpdesk, it/network"}
- mkdir -p /cybershield/{"executives/strategy, executives/board\_reports"}
- mkdir -p /cybershield/{"shared/policies, shared/announcements"}

# Add users accounts

- sudo useradd alice\_eng -m -s /bin/bash
- sudo useradd dave\_eng -m -s /bin/bash
- sudo useradd jude\_eng -m -s /bin/bash
- sudo useradd kelly\_eng -m -s /bin/bash
- sudo useradd fatima\_eng -m -s /bin/bash
- sudo useradd bob\_hr -m -s /bin/bash
- sudo useradd susan\_hr -m -s /bin/bash
- sudo useradd moses\_hr -m -s /bin/bash
- sudo useradd tim\_hr -m -s /bin/bash
- sudo useradd tolu\_hr -m -s /bin/bash
- sudo useradd john\_fin -m -s /bin/bash
- sudo useradd clara\_fin -m -s /bin/bash
- sudo useradd stephen\_fin -m -s /bin/bash
- sudo useradd kemi\_fin -m -s /bin/bash
- sudo useradd chi\_fin -m -s /bin/bash
- sudo useradd francis\_mark -m -s /bin/bash

- sudo useradd rita\_mark -m -s /bin/bash
  - sudo useradd lukman\_mark -m -s /bin/bash
  - sudo useradd tom\_mark -m -s /bin/bash
  - sudo useradd farida\_mark -m -s /bin/bash
- 
- sudo useradd damilola\_it -m -s /bin/bash
  - sudo useradd yusuf\_it -m -s /bin/bash
  - sudo useradd zainab\_it -m -s /bin/bash
  - sudo useradd kevin\_it -m -s /bin/bash
  - sudo useradd bolu\_it -m -s /bin/bash
- 
- sudo useradd jane\_exec -m -s /bin/bash
  - sudo useradd ken\_exec -m -s /bin/bash
  - sudo useradd lola\_exec -m -s /bin/bash
  - sudo useradd dayo\_exec -m -s /bin/bash
  - sudo useradd fola\_exec -m -s /bin/bash

# Set password for users

- sudo passwd alice\_eng
  - sudo passwd dave\_eng
  - sudo passwd jude\_eng
  - sudo passwd kelly\_eng
  - sudo passwd fatima\_eng
- 
- sudo passwd bob\_hr
  - sudo passwd susan\_hr
  - sudo passwd moses\_hr
  - sudo passwd tim\_hr
  - sudo passwd tolu\_hr
- 
- sudo passwd john\_fin
  - sudo passwd clara\_fin
  - sudo passwd stephen\_fin
  - sudo passwd kemi\_fin
  - sudo passwd chi\_fin
- 
- sudo passwd francis\_mark
  - sudo passwd rita\_mark
  - sudo passwd lukman\_mark
  - sudo passwd tom\_mark
  - sudo passwd farida\_mark
- 
- sudo passwd damilola\_it
  - sudo passwd yusuf\_it

- sudo passwd zainab\_it
- sudo passwd kevin\_it
- sudo passwd bolu\_it
- sudo passwd jane\_exec
- sudo passwd ken\_exec
- sudo passwd lola\_exec
- sudo passwd dayo\_exec
- sudo passwd fola\_exec

# Configure access permissions

- sudo chown -R jane\_exec:jane\_exec /cybershield
- sudo chmod -R 770 /cybershield
- sudo chown -R ken\_exec:ken\_exec /cybershield
- sudo chmod -R 770 /cybershield
- sudo chown -R lola\_exec:lola\_exec /cybershield
- sudo chmod -R 770 /cybershield
- sudo chown -R dayo\_exec:dayo\_exec /cybershield
- sudo chmod -R 770 /cybershield
- sudo chown -R fola\_exec:fola\_exec /cybershield
- sudo chmod -R 770 /cybershield
- sudo chown alice\_eng:alice\_eng /cybershield/engineering/frontend
- sudo chmod 750 /cybershield/engineering/frontend
- sudo chown -R dave\_eng:dave\_eng /cybershield/engineering
- sudo chmod -R 770 /cybershield/engineering
- sudo chown -R jude\_eng:jude\_eng /cybershield/engineering
- sudo chmod -R 770 /cybershield/engineering
- sudo chown kelly\_eng:kelly\_eng /cybershield/engineering/frontend
- sudo chmod 750 /cybershield/engineering/frontend
- sudo chown fatima\_eng:fatima\_eng /cybershield/engineering/backend
- sudo chmod 750 /cybershield/engineering/backend
- sudo chown bob\_hr:bob\_hr /cybershield/hr/records
- sudo chmod 740 /cybershield/hr/records

- sudo chown susan\_hr:susan\_hr /cybershield/hr/records
  - sudo chmod 750 /cybershield/hr/records
  - sudo chown moses\_hr:moses\_hr /cybershield/hr/payroll
  - sudo chmod 750 /cybershield/hr/payroll
  - sudo chown tim\_hr:tim\_hr /cybershield/hr/records
  - sudo chmod 740 /cybershield/hr/records
  - sudo chown tolu\_hr:tolu\_hr /cybershield/hr/records
  - sudo chmod 740 /cybershield/hr/records
- 
- sudo chown -R john\_fin:john\_fin /cybershield/finance
  - sudo chmod -R 750 /cybershield/finance
  - sudo chown clara\_fin:clara\_fin /cybershield/finance/budgets
  - sudo chmod 750 /cybershield/finance/budgets
  - sudo chown -R stephen\_fin:stephen\_fin /cybershield/finance
  - sudo chmod -R 770 /cybershield/finance
  - sudo chown kemi\_fin:kemi\_fin /cybershield/finance/tax
  - sudo chmod 750 /cybershield/finance/tax
  - sudo chown chi\_fin:chi\_fin /cybershield/finance/billing
  - sudo chmod 750 /cybershield/finance/billing
  - sudo chown francis\_mark:francis\_mark /cybershield/marketing/content
  - sudo chmod 750 /cybershield/marketing/content
  - sudo chown rita\_mark:rita\_mark /cybershield/marketing/social\_media
  - sudo chmod 750 /cybershield/marketing/social\_media
  - sudo chown lukman\_mark:lukman\_mark /cybershield/marketing/research
  - sudo chmod 740 /cybershield/marketing/research
  - sudo chown tom\_mark:tom\_mark /cybershield/marketing/designs
  - sudo chmod 750 /cybershield/marketing/designs
  - sudo chown farida\_mark:farida\_mark /cybershield/marketing/brand
  - sudo chmod 750 /cybershield/marketing/brand

- sudo chown -R damilola\_it:damilola\_it /cybershield/it
- sudo chmod -R 770 /cybershield/it
- sudo chown yusuf\_it:yusuf\_it /cybershield/it/network
- sudo chmod 750 /cybershield/it/network
- sudo chown zainab\_it:zainab\_it /cybershield/it/helpdesk
- sudo chmod 750 /cybershield/it/helpdesk
- sudo chown kevin\_it:kevin\_it /cybershield/it/backups
- sudo chmod 740 /cybershield/it/backups
- sudo chown bolu\_it:bolu\_it /cybershield/it/backups
- sudo chmod 750 /cybershield/it/backups
- sudo chmod -R 770 /cybershield/shared