# ==========================================

# JSAMUEL PORTFOLIO - NX v18.3.3 SETUP

# Stable version with full micro-frontend support

# ==========================================

# 1. CREATE NX WORKSPACE (v18.3.3)

echo "🚀 Creating Nx workspace v18.3.3..."

npx create-nx-workspace@18.3.3 big-tech-ecommerce \

--preset=empty \

--nx-cloud=false \

--package-manager=npm

cd big-tech-ecommerce

# 2. INSTALL REQUIRED PLUGINS (v18 compatible)

echo "📦 Installing plugins..."

npm install --save-dev @nx/angular@18.3.3

npm install --save-dev @nx/react@18.3.3

npm install --save-dev @nx/webpack@18.3.3

npm install --save-dev @nx/node@18.3.3

npm install --save-dev @nx/express@18.3.3

# 3. CREATE PORTFOLIO APP (Angular Host)

echo "🏠 Creating portfolio shell application..."

nx generate @nx/angular:application apps/portfolio-app \

--routing=true \

--style=scss \

--standalone=false

# 4. CREATE SWAG STORE APP (Angular Remote)

echo "🛍️ Creating swag store micro-frontend..."

nx generate @nx/angular:application apps/swag-store \

--routing=true \

--style=scss \

--standalone=false

# 5. CREATE SWAG CART APP (React Remote)

echo "🛒 Creating swag cart micro-frontend..."

nx generate @nx/react:application apps/swag-cart \

--routing=true \

--style=scss

# 6. CREATE BACKEND API

echo "🔧 Creating backend API..."

nx generate @nx/express:application apps/api

# 7. CREATE SHARED LIBRARIES

echo "📚 Creating shared libraries..."

# UI Library

nx generate @nx/angular:library libs/shared-ui \

--buildable=true

# Data Access Library

nx generate @nx/angular:library libs/shared-data-access \

--buildable=true

# Utils Library

nx generate @nx/angular:library libs/shared-utils \

--buildable=true

# State Management Library

nx generate @nx/angular:library libs/shared-state \

--buildable=true

# 8. SETUP MODULE FEDERATION

echo "🔗 Setting up Module Federation..."

# Configure portfolio-app as host

nx generate @nx/angular:setup-mf portfolio-app \

--mfType=host \

--port=4200

# Configure swag-store as remote

nx generate @nx/angular:setup-mf swag-store \

--mfType=remote \

--port=4201 \

--host=portfolio-app

# Configure swag-cart as remote (React)

nx generate @nx/react:setup-mf swag-cart \

--mfType=remote \

--port=4202 \

--host=portfolio-app

# 9. INSTALL DEPENDENCIES

echo "🔧 Installing dependencies..."

# Core dependencies

npm install rxjs@^7.8.0 zustand

# Angular dependencies

npm install @angular/material @angular/cdk @angular/forms

# React dependencies

npm install react-router-dom@^6.8.0 react-hook-form

npm install --save-dev @types/react-router-dom

# Backend dependencies

npm install express cors helmet morgan

npm install --save-dev @types/express @types/cors @types/morgan

# HTTP client

npm install axios

# Development tools

npm install --save-dev concurrently

# 10. SETUP PACKAGE.JSON SCRIPTS

echo "⚙️ Setting up scripts..."

npm pkg set scripts.start:all="concurrently \"nx serve portfolio-app\" \"nx serve swag-store\" \"nx serve swag-cart\" \"nx serve api\""

npm pkg set scripts.start:frontend="concurrently \"nx serve portfolio-app\" \"nx serve swag-store\" \"nx serve swag-cart\""

npm pkg set scripts.build:all="nx run-many --target=build --projects=portfolio-app,swag-store,swag-cart,api"

npm pkg set scripts.test:all="nx run-many --target=test --all"

npm pkg set scripts.lint:all="nx run-many --target=lint --all"

# 11. VERIFY SETUP

echo "✅ Verifying setup..."

nx show projects

# 12. INITIAL GIT COMMIT

echo "📝 Initial commit..."

git init

git add .

git commit -m "feat: nx v18.3.3 workspace with micro-frontend architecture

✨ Created:

- Portfolio App (Angular host) - port 4200

- Swag Store (Angular remote) - port 4201

- Swag Cart (React remote) - port 4202

- API backend (Express) - port 3333

- Shared libraries: ui, data-access, utils, state

- Module Federation configuration

- Development scripts

🎯 Ready for Big Tech portfolio development"

# 13. SUCCESS MESSAGE

echo ""

echo "🎉 SUCCESS! Workspace created with Nx v18.3.3"

echo ""

echo "📁 Your workspace structure:"

echo " apps/"

echo " ├── portfolio-app/ (Angular host - 4200)"

echo " ├── swag-store/ (Angular remote - 4201)"

echo " ├── swag-cart/ (React remote - 4202)"

echo " └── api/ (Express API - 3333)"

echo ""

echo " libs/"

echo " ├── shared-ui/"

echo " ├── shared-data-access/"

echo " ├── shared-utils/"

echo " └── shared-state/"

echo ""

echo "🚀 Next steps:"

echo " 1. npm run start:frontend (starts all frontend apps)"

echo " 2. nx serve api (starts backend)"

echo " 3. Visit http://localhost:4200"

echo ""

echo "✨ Your Big Tech portfolio foundation is ready!"

# ==========================================

# VERIFICATION COMMANDS

# ==========================================

echo ""

echo "🧪 Verification commands:"

echo " nx graph # View dependency graph"

echo " nx show projects # List all projects"

echo " nx serve portfolio-app # Test portfolio app"

echo " nx serve swag-store # Test swag store"

echo " nx serve swag-cart # Test swag cart"

echo " nx serve api # Test API"

echo ""

# ==========================================

# TROUBLESHOOTING

# ==========================================

echo "🔧 If you encounter issues:"

echo " npm install --legacy-peer-deps # For dependency conflicts"

echo " nx reset # Reset Nx cache"

echo " npx kill-port 4200 4201 4202 3333 # Kill port processes"