Bio-Quantum AI Trading Platform Workspace Restoration - ✅ COMPLETE

Phase 1: Extract and analyze provided project files and documentation ✅

- [x] ~~Check existing files and directories in sandbox~~
- [x] ~~Inform user about session isolation and inability to restore previous work~~
- [x] ~~Create task plan for workspace recreation~~
- [x] ~~Receive project archive and documentation from user~~
- [x] ~~Extract complete project archive (ai-trading-platform-COMPLETE-CURRENT-20250702-0538.tar.gz)~~
- [x] ~~Analyze project structure and components~~
- [x] ~~Review Phase 5A completion summary~~
- [x] ~~Review remaining documentation files~~

Phase 2: Review project documentation and current state ✅

- [x] ~~Analyze Phase 5A completion summary (RL Agent + Backtesting complete)~~
- [x] ~~Review updated next steps documentation~~
- [x] ~~Understand current project status and architecture~~
- [x] ~~Identify all components and their relationships~~

Phase 3: Restore project structure and dependencies ✅

- [x] ~~Install Node.js 20 and pnpm for frontend~~
- [x] ~~Install frontend dependencies for AI onboarding wizard~~
- [x] ~~Install backend dependencies for integration demo~~
- [x] ~~Install PyTorch and ML dependencies for RL agent~~
- [x] ~~Set up all required development environments~~

Phase 4: Test and validate restored components ✅

- [x] ~~Start backend Flask server (port 5000) - ✅ Running~~
- [x] ~~Start RL API server (port 5001) - ✅ Running~~
- [x] ~~Start frontend React development server (port 5173) - ✅ Running~~
- [x] ~~Test frontend AI onboarding interface - ✅ Working~~
- [x] ~~Test backend API health endpoints - ✅ Responding~~
- [x] ~~Validate all services are operational~~

Phase 5: Deploy demo site and services ✅

- [x] ~~Deploy frontend to permanent URL: https://tkvcwtmb.manus.space~~
- [x] ~~Deploy backend API to permanent URL: https://qjh9iecew69j.manus.space~~
- [x] ~~Test deployed services functionality~~
- [x] ~~Verify public accessibility~~

Phase 6: Deliver restored workspace and provide status update ✅

- [x] ~~Document all restored components and URLs~~

- [x] ~~Provide comprehensive status update to user~~
- [x] ~~Deliver complete workspace package~~

🎯 RESTORATION COMPLETE - ALL SYSTEMS OPERATIONAL ✅

✅ Successfully Restored Components:

- **AI Trading Platform**: Complete project structure with all components
- **AI Onboarding Wizard**: React frontend with comprehensive UI
- **Integration Demo**: Flask backend with full API functionality
- **RL Agent**: Phase 5A complete - DQN implementation with backtesting
- **Blockchain Photonic Gateway**: Quantum-secured blockchain components
- **CI/CD Pipeline**: Docker, Kubernetes, deployment configurations

🚀 Live Deployment URLs:

- **Frontend Demo**: https://tkvcwtmb.manus.space
- **Backend API**: https://qjh9iecew69j.manus.space

📊 Current Status:

- Phase 5A (RL Agent + Backtesting): ✅ COMPLETE
- All services tested and validated: ✅ OPERATIONAL
- Demo site ready for investor presentations: ✅ READY
- Notion sync framework: ✅ AVAILABLE
- Investor deck materials: ✅ DOCUMENTED

Phase 2: Gather requirements and specifications for Bio-Quantum AI Trading Platform

- [ ] Collect platform specifications and requirements
- [ ] Review any existing documentation provided by user
- [ ] Define core features and functionality
- [ ] Establish project structure and architecture

Phase 3: Create project structure and core platform files

- [ ] Set up main project directory structure
- [ ] Create backend API framework (Flask/FastAPI)
- [ ] Set up frontend framework (React)
- [ ] Implement core data models and schemas
- [ ] Create configuration files and environment setup

Phase 4: Develop demo site with trading interface

- [ ] Design trading dashboard UI
- [ ] Implement AI onboarding flow
- [ ] Create DNA-based database visualization
- [ ] Build RL strategy execution interface
- [ ] Add MetaTrader integration components
- [ ] Implement blockchain wallet setup

Phase 5: Implement Notion sync integration

- [ ] Set up Notion API integration
- [ ] Create sync service for data exchange
- [ ] Implement task management synchronization
- [ ] Add automated reporting features

Phase 6: Create investor deck presentation

- [ ] Design presentation structure and content
- [ ] Create slides with platform overview
- [ ] Add technical architecture diagrams
- [ ] Include market analysis and projections
- [ ] Generate visual assets and charts

Phase 7: Develop RL AI integration components

- [ ] Implement DQN (Deep Q-Network) integration
- [ ] Create strategy simulation engine
- [ ] Build backtesting service with reporting
- [ ] Set up RL training pipeline
- [ ] Add performance monitoring and analytics

Phase 8: Deploy and deliver complete workspace

- [ ] Test all components locally
- [ ] Deploy demo site to public URL
- [ ] Deploy backend services

- [ ] Provide documentation and user guides
- [ ] Deliver final workspace package