Teacher Evaluation Platform

Project: Teacher Evaluation Platform for Schoolday Integration
Date: August 30, 2025

Project Overview

You're building a comprehensive teacher evaluation platform that integrates with **Schoolday's ecosystem** as a vendor partner. Think of it as a sophisticated faculty assessment dashboard that plugs into their existing educational technology platform.

Core Purpose: Replace traditional paper-based teacher evaluations with a data-driven platform that tracks teaching effectiveness, research output, service contributions, and professional development.

Technical Stack & Architecture

Backend Architecture

- **Microservices** pattern with 5 main services:
    - Authentication Service (OAuth 2.0 integration with Schoolday)
    - Data Integration Service (syncs with Schoolday APIs)
    - Evaluation Engine (calculates scores and analytics)
    - Reporting Service (generates reports and dashboards)
    - Document Management Service

Key Integrations

- **Schoolday Partner API**: OAuth 2.0 authentication + district data access
- **Discovery API**: Automatically finds connected school districts
- **OneRoster API**: Gets teacher/course roster data
- **Schoolday Academy**: Links professional development courses

Database Design

- **PostgreSQL**: Main relational data (teachers, evaluations, scores)
- **MongoDB**: Document storage (CVs, certificates, files)
- **InfluxDB**: Time-series data (performance metrics over time)

Frontend

We prefer

- **React** with responsive design
- **Chart.js/D3** for data visualizations (radar charts, trend lines)
- Purple/blue color scheme (#6366F1 primary)

Key Features You're Building

1. Multi-Tab Evaluation Interface

- **Overview**: Radar chart + 4 key metrics cards
- **Teaching**: Course listings + student evaluation trends
- **Research**: Publication tracking + grant management
- **Service**: Committee work + community contributions
- **Professional**: Education history + certifications
- **Career**: Employment timeline + awards

2. Advanced Analytics

- Peer comparison algorithms
- Trend analysis and predictions
- Performance benchmarking
- Custom report generation

3. Schoolday Integration Points

- Single sign-on (SSO) through Schoolday
- Real-time data sync with district systems
- Automatic roster updates
- Professional development recommendations

Integration Specs

- **OAuth 2.0** client credentials flow
- **REST APIs** with JSON responses
- **Webhook** support for real-time updates
- **Rate limiting**: 1000 requests/hour per user

Key APIs You'll Build

GET /api/teachers/{id}/evaluation

POST /api/evaluations/{id}/submit

GET /api/analytics/peer-comparison

GET /api/reports/generate

Schoolday Integration Workflow

1. Register as Schoolday vendor partner
2. Get OAuth credentials from their Application Settings
3. Use Discovery API to find connected districts
4. Sync roster data via OneRoster API
5. Implement SSO for seamless user experience

UI/UX Key Points

- **Mobile-first** responsive design
- **Accessibility** (WCAG 2.1 AA compliance)
- **Progressive disclosure** (don't overwhelm with data)
- **Consistent navigation** (left sidebar + horizontal tabs)
- **Data visualization** focus (charts over tables)

Immediate Next Steps

1. **Set up development environment** with microservices architecture
2. **Register with Schoolday** as vendor partner (get API credentials)
3. **Build authentication service** first (foundation for everything)
4. **Create basic teacher profile** CRUD operations
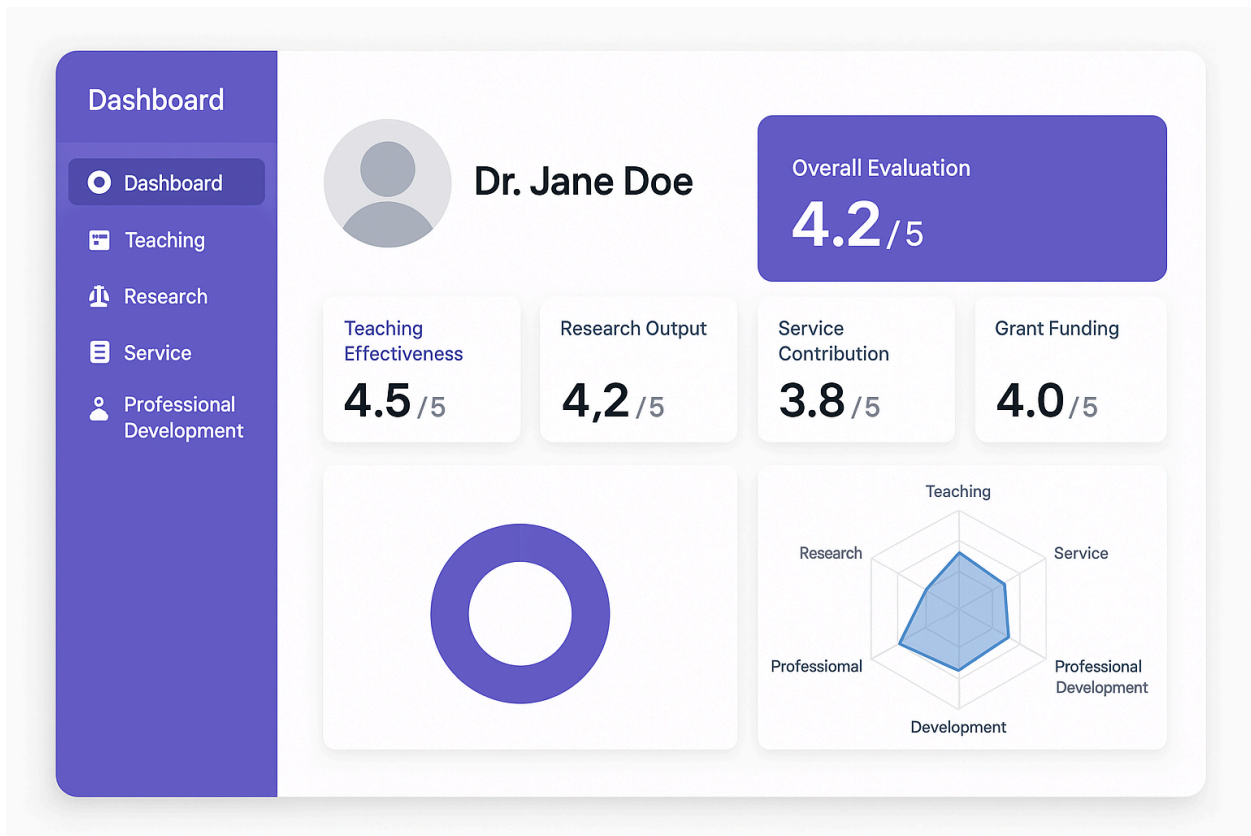5. **Implement Schoolday OAuth integration**

Resources & Documentation

- Schoolday Partner API docs:
  https://help.schoolday.com/knowledge/partner-integration-api
- Design mockups: See attached PNG files
- Detailed technical specs: See attached architecture documents

Success Metrics

- **User adoption**: 80% of faculty using platform within 6 months
- **Performance**: <2s page loads, 99.9% uptime
- **Integration**: Seamless SSO with zero authentication issues
- **Data accuracy**: Real-time sync with <1% error rate

Bottom Line: You're building a modern, data-driven replacement for traditional teacher evaluations that integrates seamlessly with Schoolday's existing platform. Focus on clean APIs, responsive UI, and rock-solid Schoolday integration.

Courses Taught

Course	Evaluation
2025 Spring	
ECON302: Business Management	4,5/5.0
HIST217: Modern History	4.7/5.0
STAT312: Statistical Methods	4.8/5.0
2024 Fall	
ECON302: Business Management	4,6/5.0

Student Evaluation Results