

הצעת פרויקט – TaskFlow Pro

פיתוח תוכנה מתקדם בענן

Project Proposal: TaskFlow Pro

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Link to Github: <https://github.com/Sportify-Sport/TaskFlow-Pro>

Executive Summary:

Modern organizations face significant challenges in task management. Small teams often rely on simple todo apps that lack essential features, while enterprise solutions are prohibitively expensive and complex. This creates a gap in the market for a scalable, feature-rich, yet cost-effective task management solution.

Problem:

Current task management solutions fail to address the needs of growing organizations:

- Personal todo apps lack role-based access control and analytics
- Enterprise systems require significant infrastructure investment
- No middle-ground solution offers professional features at reasonable cost
- Bulk operations and administrative oversight are typically missing
- Email notifications and audit trails are not integrated

Solution:

TaskFlow Pro is a serverless task management system built entirely on AWS cloud services. It provides enterprise-grade features without the enterprise costs by leveraging pay-per-use serverless architecture. The system automatically scales from small teams to large organizations while maintaining consistent performance and cost efficiency.

Key Features:

- **Role-Based Access Control:** Separate user and admin roles with group-based permissions
- **Comprehensive Task Management:** Create, read, update, delete tasks with priorities and due dates
- **Bulk Operations:** CSV import/export for efficient task management
- **Real-Time Notifications:** Email alerts via SNS for task events
- **Visual Analytics Dashboard:** Donut charts showing task distribution by priority
- **Modern UI Features:** Dark mode, search, filtering, and responsive design

- ### **Solution and Tools/Technologies (AWS Services):**

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- The diagram illustrates the TaskFlow system architecture on AWS Cloud. It shows the flow from users through authentication (1. Authenticate, 2. OAuth Code, 3. Code Exchange for Tokens, 4. ID Token, Access Token) to task management. Key components include TaskFlow-PreSignupValidation, User Pool, TaskFlow-AutoAssignGroup, taskflow-website-20, Amazon API Gateway, TaskFlow-TaskHandler, TaskFlow-Notifications, TaskFlow-ProcessingQueue, TaskFlow-SQSPProcessor, TaskFlow-Analytics, EventBridge (Daily): TaskFlow-DailyReport, Amazon CloudWatch, AWS CloudTrail, and various databases like DynamoDB: TaskFlow-Tasks and Parameter Store.