









Todowa Enhanced - Complete Updated System v2.0

Your original Todowa system, now supercharged with advanced AI tool management!





What's New in This Version?

This is your **complete original Todowa system** with all the enhanced features seamlessly integrated:

Enhanced Features Added:

-  **Enhanced Tool Registry** with performance monitoring
-  **Complete CRUD Operations** for tasks, reminders, categories
-  **Advanced Agent Integration** with smart suggestions
-  **Performance Analytics** and health monitoring
-  **Smart Categorization** based on content analysis
-  **Auto-parameter Injection** for seamless operations
-  **Safe Migration System** with backup/rollback
-  **Comprehensive Test Suite** for reliability

Your Original Files (Preserved):

-  All your `src/` agent system files
-  All your `prompts/` directory
-  Your `database_personal.py`, `database_silent.py`, `services.py`
-  Your `app.py`, `config.py`, and all other custom files

-  Your `.git` history and all settings

New Enhanced Files Added:

- `enhanced_tools.py` - Enhanced tool registry with monitoring
- `enhanced_ai_tools.py` - Complete CRUD operations
- `enhanced_agent_tools_mixin.py` - Advanced agent integration
- `enhanced_action_schema.md/.json` - Updated schemas
- `migrate_tools.py` - Safe migration script (Windows-compatible)
- `test_enhanced_tools.py` - Comprehensive test suite
- `ai_tools.py` - Backward compatibility layer

Quick Start (2 Minutes)

1. Install New Dependencies

```
pip install -r requirements.txt
```

(croniter dependency already added to requirements.txt)

2. Run Migration (Optional)

```
# Preview changes (optional)
python migrate_tools.py --dry-run

# Apply enhancements (optional - files already integrated)
python migrate_tools.py
```

3. Test Everything Works

```
python test_enhanced_tools.py --verbose
```

4. Run Your Todowa System

```
python app.py  
# or  
python run.py
```

Integration Status

Backward Compatibility Maintained:

- Your existing agents work unchanged
- All original functionality preserved
- Existing imports continue to work
- Database schema remains compatible

New Capabilities Available:

- Enhanced tool performance monitoring
- Smart task categorization and reminders
- Advanced analytics and reporting
- Bulk operations and health checks



Enhanced Database Schema

The system includes enhanced database support. If you want to use the new features fully, add these tables to your database:

```
-- Enhanced tasks table (optional - enhances existing
functionality)
```

```
CREATE TABLE IF NOT EXISTS tasks (
  id SERIAL PRIMARY KEY,
  user_id TEXT NOT NULL,
  title TEXT NOT NULL,
  description TEXT DEFAULT '',
  priority TEXT DEFAULT 'medium',
  status TEXT DEFAULT 'pending',
  category TEXT DEFAULT 'general',
  due_date DATE,
  created_at TIMESTAMP DEFAULT NOW(),
  updated_at TIMESTAMP DEFAULT NOW()
);
```

```
-- New reminders table
```

```
CREATE TABLE IF NOT EXISTS reminders (
  id SERIAL PRIMARY KEY,
  user_id TEXT NOT NULL,
  task_id INTEGER REFERENCES tasks(id),
  title TEXT NOT NULL,
  description TEXT DEFAULT '',
  remind_at TIMESTAMP NOT NULL,
  is_sent BOOLEAN DEFAULT FALSE,
  created_at TIMESTAMP DEFAULT NOW()
);
```

```
-- New categories table
```

```
CREATE TABLE IF NOT EXISTS categories (
  id SERIAL PRIMARY KEY,
  user_id TEXT NOT NULL,
  name TEXT NOT NULL,
  description TEXT DEFAULT '',
  color TEXT DEFAULT '#3B82F6',
```

```
created_at TIMESTAMP DEFAULT NOW()  
);
```

Usage Examples

Using Enhanced Features in Your Agents:

```
from enhanced_agent_tools_mixin import EnhancedAgentToolsMixin  
  
class YourAgent(EnhancedAgentToolsMixin):  
    def __init__(self, supabase_client, user_id):  
        super().__init__()   
        self.initialize_tools(supabase_client, user_id)  
  
    def create_smart_task(self, title, description):  
        # Uses smart categorization and auto-injection  
        return self.execute_tool('create_task',  
                                title=title,  
                                description=description)  
  
    def get_performance_report(self):  
        return self.get_tool_performance_report()
```

Enhanced Task Management:

```
# Create a task with smart categorization
result = execute_tool('create_task',
                      title='Doctor appointment booking',
                      priority='high')
# Automatically categorized as 'health'!

# Create reminder with auto-task creation
result = execute_tool('create_reminder',
                      title='Team meeting prep',
                      remind_at='2025-08-22T09:00:00Z')
# Task automatically created and linked!
```



Performance Monitoring

```
# Get analytics
analytics = execute_tool('get_task_analytics', days=7)

# Check system health
health = agent.health_check()

# View performance metrics
report = agent.get_tool_performance_report()
```



Troubleshooting

Common Issues:

1. **Import errors:** Ensure all files are in the root directory
2. **Database issues:** Check Supabase connection

3. **Missing dependencies:** Run `pip install -r requirements.txt`

Log Files:

- `migration.log` - Migration process logs
- `test_results.log` - Test execution logs

Need Help?

- Check `docs_enhanced/` for detailed documentation
- Run tests: `python test_enhanced_tools.py --verbose`
- View tool performance: Use the built-in analytics

You're All Set!

Your Todowa system is now enhanced with enterprise-grade features while maintaining full backward compatibility. All your existing functionality works exactly as before, but now you have access to:

-  **Advanced Analytics**
-  **Smart AI Features**
-  **Enterprise Reliability**
-  **Performance Monitoring**
-  **Developer Tools**

Start your enhanced Todowa system:

```
python app.py
```

Enjoy your supercharged AI agent system! 