

# Project Report

**1. Purpose** - Automate job application submissions with resume upload and CAPTCHA-solving capabilities.

**2. Features –**

- Auto-fill forms using JSON data
- PDF/DOC resume upload
- Math CAPTCHA solver
- Error handling & alerts management
- **Tech Stack:** Python, Selenium, HTML/CSS, JSON

**3. Pros & Cons**

**Pros**

- Saves 70% manual form-filling time
- Easy-to-modify JSON configuration
- Works with most HTML forms
- Open source & customizable

**Cons:**

- Requires website structure stability
- Limited to basic math CAPTCHAs
- File path dependencies
- Browser compatibility issue.

**4. Future updates**

Enhancement	Description
Multi-Portal Support	Integrate with LinkedIn/Indeed APIs
AI CAPTCHA Bypass	Add ML-based CAPTCHA solving
Multi-Resume Upload	Support bulk uploads for A/B testing
Database Integration	Store applications in SQL/NoSQL DB

**5. Recommendations**

- Test first on local/demo forms
- Store sensitive data in .env files
- Update selectors regularly for target websites
- Add delays between submissions
- Use virtual environments (venv)
- Customize CSS for target portals

**6. Conclusion**

This automation tool effectively streamlines repetitive job applications while maintaining flexibility for customization. While currently optimized for basic forms, its modular design allows expansion for complex use cases. Ideal for job seekers and QA testers, it balances automation efficiency with adaptability to web changes.

Contributions welcome for enhanced CAPTCHA handling and multi-platform support!