



Project Title: Student Mentorship & Registration Automation System

Date: September 29, 2025

Prepared by: BusinessXcelerators Team

Project Justification:

MyFuture UP currently operates with manual processes for student registration, mentor assignment, session scheduling, and performance tracking, resulting in operational inefficiencies, extended waiting times, data inconsistencies, and limited scalability potential. This project addresses critical operational challenges by developing an automated web-based mentorship management system that will:

- Eliminate registration bottlenecks and reduce processing time by 50%
- Improve data management accuracy and accessibility
- Optimize mentor-student matching through automated algorithms
- Reduce scheduling conflicts and human errors
- Enable scalable operations supporting organizational growth
- Align with UN SDG 4: Quality Education by improving accessibility to mentorship services

The system directly supports the organization's mission to provide effective educational mentorship to students from disadvantaged communities while ensuring operational sustainability and growth capacity. The project aligns with strategic organizational objectives and addresses critical operational pain points that currently limit service delivery effectiveness and scalability potential.

Product Characteristics and Requirements:

Core System Components with Technical Specifications:

1. Student Registration Module

- **Characteristics:** Web-based interface with data validation, duplicate detection, and integration capabilities
- **Requirements:** Support for multiple data formats, real-time validation, secure data storage
- **Technical Specs:** Process 100+ registrations simultaneously with 99% data accuracy
- **Justification:** Eliminates manual data entry errors and reduces processing time significantly

2. Mentor Management System

- **Characteristics:** Comprehensive profile management with availability tracking and performance monitoring
- **Requirements:** Multi-criteria profile setup, calendar integration, reporting capabilities
- **Technical Specs:** Support 200+ mentor profiles with real-time availability updates
- **Justification:** Enables efficient mentor resource allocation and performance optimization

3. Automated Matching Engine

- **Characteristics:** Rule-based algorithm with override capabilities and learning functionality
- **Requirements:** Multi-parameter matching (subject, location, availability, experience level)
- **Technical Specs:** Generate matches with 80% compatibility rating within 5 minutes
- **Justification:** Optimizes mentor-student pairing effectiveness while maintaining flexibility

4. Scheduling and Calendar System

- **Characteristics:** Integrated calendar with conflict detection, automated reminders, rescheduling
- **Requirements:** Email/SMS integration, timezone support, mobile compatibility

Product User Acceptance Criteria:**System Deployment Success:**

- **Acceptance Criteria:** System operational with all modules functioning as specified by September 1, 2026
- **Verification Method:** User acceptance testing completion and stakeholder sign-off
- **Measurement:** Binary pass/fail based on functional requirements fulfillment

Efficiency Improvement Success:

- **Acceptance Criteria:** 50% reduction in registration processing time (baseline vs. post-implementation)
- **Verification Method:** Time-motion studies and process measurement
- **Measurement:** Quantitative analysis of average processing duration

Mentor-Student Matching Accuracy:

- **Acceptance Criteria:** 80% matching accuracy as evaluated by administrators and mentors
- **Verification Method:** Post-match evaluation surveys and feedback collection
- **Measurement:** Percentage of successful matches based on compatibility assessments

System Reliability Achievement:

- **Acceptance Criteria:** 95% uptime during pilot operating hours with daily backup verification
- **Verification Method:** System monitoring logs and backup restore testing
- **Measurement:** Uptime percentage calculation and backup success rate tracking

Training Effectiveness Success:

- **Acceptance Criteria:** 90% of target users successfully complete training programs
- **Verification Method:** Training completion certificates and competency assessments
- **Measurement:** Participation rate⁴ and competency evaluation scores

User Satisfaction Achievement:

Summary of Project Deliverables**Project management-related deliverables:**

Business case, project charter, team contract, scope statement, WBS (Work Break-down Structure), project schedule, cost baseline, status reports, risk management plan, quality management plan, communication plan, stakeholder management plan, final project presentation, final project report, lessons-learned report, change management documentation, and any other documents required to manage the project using Hybrid methodology (Agile + Waterfall approaches integrated for optimal project delivery).

Product-related deliverables:

Requirements analysis reports, system architecture design documents, database design documentation, user interface mockups and prototypes, software code (web application), API documentation, security implementation guides, user manuals and training materials, system testing reports, deployment guides, data migration procedures, backup and recovery documentation, performance optimization reports, integration testing results, user acceptance testing documentation, and system maintenance procedures.

Training and Support Deliverables:

Administrator training program (16-hour comprehensive workshop), mentor onboarding modules (8-hour structured program), student user guides and video tutorials, train-the-trainer materials for sustainability, help desk procedures with escalation protocols, troubleshooting guides with solution matrices, and ongoing support documentation for 3-month post-deployment period to ensure successful adoption and system stability.

1 PROJECT BOUNDARIES AND CONSTRAINTS

1.1 In-Scope Activities

- Complete web-based system development using modern open-source frameworks
- Database design, implementation, and optimization for performance
- User interface design with responsive web capabilities
- Comprehensive system testing (unit, integration, user acceptance testing)
- Production deployment with environment configuration and optimization
- Initial data migration from existing manual systems and processes
- Training program development and delivery for all user groups
- User documentation creation and distribution in multiple formats
- Initial system support for 3 months post-deployment period
- Basic integration with organizational email systems and workflows
- Hybrid methodology implementation with Agile sprints within Waterfall framework

1.2 Out-of-Scope Activities

- Mobile application development (responsive web design only)
- Advanced artificial intelligence or machine learning algorithms
- Integration with external third-party systems beyond email
- Multi-language support (English only in initial phase)
- Advanced analytics and predictive modeling capabilities
- Ongoing system maintenance beyond initial 3-month period
- Payment processing or financial management systems
- Hardware procurement or infrastructure setup
- Business process reengineering beyond system implementation
- Marketing or promotional activities for system adoption

2 ASSUMPTIONS AND CONSTRAINTS

2.1 Key Assumptions

1. Adequate internet connectivity and hosting resources available throughout development and deployment
2. Open-source development tools and frameworks meet all functional requirements
3. Existing organizational data can be successfully cleaned and migrated to new system
4. Team members maintain consistent availability (maximum 20 hours per week due to academic commitments)
5. Key stakeholders provide timely feedback and participate actively in testing activities
6. Basic computer literacy exists among target users for effective system adoption
7. No significant regulatory changes occur during project timeline affecting compliance requirements

2.2 Key Constraints

- **Time Constraint:** All deliverables must be completed by October 13, 2025 for academic assessment
- **Budget Constraint:** Project restricted to R137,000 total budget allocation
- **Resource Constraint:** Limited to 4 student team members with concurrent academic responsibilities
- **Technology Constraint:** Restricted to open-source technologies and frameworks only
- **Platform Constraint:** Web-based solution only, no native mobile application development
- **Compliance Constraint:** Must adhere to POPIA and educational sector data protection standards

3 RISK MANAGEMENT

3.1 High-Priority Risks and Mitigation Strategies

- **Scope Creep Risk:** Implement formal change control process with regular stakeholder communication and documented requirement approval procedures
- **Team Availability Risk:** Establish cross-training programs, task redistribution protocols, and buffer time allocation for academic schedule conflicts
- **System Performance Risk:** Conduct performance testing protocols, implement code optimization reviews, and design scalable architecture from project inception
- **Stakeholder Disengagement Risk:** Maintain regular communication schedules, provide feedback incentives, and establish multiple engagement channels
- **Security Vulnerability Risk:** Implement security audit procedures, encryption protocols, and comprehensive access control testing throughout development

4 SUCCESS CRITERIA AND KEY PERFORMANCE INDICATORS

KPI Category	Metric Description	Target	Achievement
Delivery Performance	On-time milestone delivery	100%	of major milestones
Budget Management	Budget variance control	Maximum	5% deviation
Quality Assurance	Critical defect elimination	Zero defects in production	
User Satisfaction	Stakeholder satisfaction rating	Minimum	85% positive
System Performance	System uptime availability	Minimum	95% operational
Process Efficiency	Registration time reduction	50%	improvement
Training Effectiveness	Training completion rate	Minimum	90% certified
Data Accuracy	Data processing accuracy	99.9%	accuracy rate
Matching Efficiency	Mentor-student compatibility	80%	successful matches
Support Response	Issue resolution time	95%	within 24 hours

5 APPROVAL AND SIGN-OFF

Role & Name	Date	Signature
Project Sponsor Luzuko Marwanqana CEO, MyFuture UP		
Project Manager Bahle Ludidi BusinessXcelerators	September 29, 2025	B. Ludidi
Business Analyst Noluthando Mlangeni BusinessXcelerators		
Technical Lead Nhlakanipho Nene BusinessXcelerators		
IT Support Sandile Lubisi BusinessXcelerators		

This Scope Statement serves as the foundational agreement for the Student Mentorship & Registration Automation System project. All project activities, deliverables, and decisions must align with the scope, objectives, and constraints outlined in this document. Any deviations require formal change control process execution as defined in the project management plan.

— END OF DOCUMENT —