Incubator Website Test Documentation

1. Overview

This document outlines the testing strategy and results for the Incubator Website platform, covering all major functionalities and user roles. All management of startups, users, roles, trainers, mentors, events, analytics, and resources is performed through the Admin Dashboard. Additionally, the Student Dashboard supports the incubation process, including deliverable submission and evaluation, stage progression, workshop participation, and requests for resources and mentors.

2. User Roles Tested

- Admin
- Mentor
- Trainer
- Student

3. Functional Testing

3.1 Admin Dashboard: Role & User Management

- **RM-001**: Admin can create new user accounts
 - Steps: Log in as Admin > Navigate to Admin Dashboard → User Management
 > Create new user with specific role
 - Expected Result: User created with appropriate permissions
 - Status: PASS
- **RM-002**: Admin can modify user roles
 - Steps: Log in as Admin > Admin Dashboard → User Management > Select existing user > Modify role assignment
 - Expected Result: Role successfully updated with appropriate permission changes
 - Status: PASS
- **RM-003**: Role-specific access restrictions
 - Steps: Log in with each role type > Attempt to access restricted areas
 - Expected Result: Users can only access areas permitted for their role

o Status: PASS

3.2 User Management

- **UM-001**: User registration
 - Steps: Navigate to registration page > Complete registration form > Submit form
 - Expected Result: User account created with pending status
 - Status: PASS
- **UM-002**: User account approval
 - Steps: Log in as Admin > View pending registrations > Approve user
 - Expected Result: User account activated with appropriate role
 - Status: PASS

3.3 Admin Dashboard: Startup Management (CRUD)

- **SM-001**: Create new startup
 - Steps: Log in as Admin > Admin Dashboard → Startup Management > Fill startup creation form > Submit form
 - Expected Result: Startup is created and appears in list
 - Status: PASS
- **SM-002**: View startup details
 - Steps: Admin Dashboard → Startup Management > Select existing startup > View detailed information
 - Expected Result: All startup details displayed correctly
 - Status: PASS
- **SM-003**: Edit startup details
 - Steps: Admin Dashboard → Startup Management > Select startup > Modify details > Save changes
 - Expected Result: Changes are saved and displayed correctly
 - Status: PASS
- **SM-004**: Delete startup
 - Steps: Admin Dashboard → Startup Management > Select startup > Delete > Confirm deletion
 - o Expected Result: Startup is removed from system
 - Status: PASS

3.4 Admin Dashboard: Stage Management (via Incubation Process)

- **STG-001**: Create incubation stage
 - Steps: Log in as Admin > Incubation Process → Stage Management > Create new stage
 - Expected Result: Stage created successfully
 - Status: PASS
- **STG-002**: View stage details
 - Steps: Incubation Process → Stage Management > Select stage
 - Expected Result: Stage details displayed correctly
 - Status: PASS
- **STG-003**: Update stage details
 - Steps: Incubation Process → Stage Management > Select stage > Modify details > Save changes
 - Expected Result: Changes saved and displayed correctly
 - Status: PASS
- **STG-004**: Delete stage
 - Steps: Admin Dashboard → Incubation Process → Stage Management > Select stage > Delete stage > Confirm deletion
 - Expected Result: Stage removed from system
 - Status: PASS

3.5 Student Dashboard: Incubation Process Features

All student-facing actions occur under Student Dashboard \rightarrow Incubation Process.

- **SD-001**: Submit deliverable
 - \circ Steps: Log in as Student > Student Dashboard \rightarrow Incubation Process \rightarrow Deliverables > Upload submission
 - Expected Result: Deliverable uploaded and confirmation displayed
 - Status: PASS

- **SD-003**: Progress through stages
 - Steps: Student Dashboard → Incubation Process → Stages > View current stage > Complete requirements
 - Expected Result: Stage marked complete and next stage unlocked
 - Status: PASS
- **SD-004**: Participate in workshops
 - Steps: Student Dashboard → Incubation Process → Workshops > Select workshop > Register
 - Expected Result: Registration confirmed and workshop appears in calendar
 - o Status: PASS
- **SD-005**: Request resources and mentors
 - Steps: Student Dashboard → Incubation Process → Requests > Select Resources/Mentors > Submit request
 - Expected Result: Request recorded and status visible in dashboard
 - Status: PASS

3.6 Application Forms

- **AF-001**: Create application form (Admin)
 - Steps: Log in as Admin > Navigate to Forms > Create new form with fields
 - Expected Result: Form created and available for applicants
 - Status: In Progress
- **AF-002**: Submit application form (Student)
 - Steps: Log in as Student > Student Dashboard → Application Form > Complete and submit
 - Expected Result: Application submitted with confirmation
 - Status: PASS
- **AF-003**: View application forms (Admin)
 - Steps: Admin Dashboard → Applications > Select application to view
 - Expected Result: Application details displayed correctly
 - o Status: In Progress

3.7 Admin Dashboard: Mentor Management

- **MM-001**: Create mentor profile
 - Steps: Admin Dashboard → Mentor Management → Create mentor > Complete profile > Set availability
 - Expected Result: Mentor profile created with specializations
 - Status: PASS
- **MM-002**: View mentor profile
 - Steps: Admin Dashboard → Mentor Management > Select mentor
 - Expected Result: Mentor profile displayed correctly
 - o Status: PASS
- MM-003: Update mentor profile
 - Steps: Admin Dashboard → Mentor Management > Select mentor > Update information > Save
 - Expected Result: Profile information updated correctly
 - Status: In Progress
- **MM-004**: Delete mentor profile
 - Steps: Admin Dashboard → Mentor Management > Select mentor > Delete > Confirm
 - o Expected Result: Profile removed from system
 - o Status: PASS
- **MM-005**: Mentor-startup matching
 - Steps: Navigate to matching interface > Match mentor to startup > Confirm assignment
 - Expected Result: Mentor and startup linked successfully
 - Status: PASS

3.8 Admin Dashboard: Trainer Management

- **TM-001**: Create trainer profile
 - Steps: Admin Dashboard → Trainer Management → Create trainer > Complete profile > Set availability
 - Expected Result: Trainer profile created with specializations
 - o Status: PASS

- TM-002: View trainer profile
 - Steps: Admin Dashboard → Trainer Management > Select trainer
 - Expected Result: Trainer profile displayed correctly
 - Status: PASS
- **TM-003**: Update trainer profile
 - Steps: Admin Dashboard → Trainer Management > Select trainer > Update > Save
 - Expected Result: Profile information updated correctly
 - o Status: PASS
- TM-004: Delete trainer profile
 - Steps: Admin Dashboard → Trainer Management > Select trainer > Delete > Confirm
 - Expected Result: Profile removed from system
 - Status: PASS
- TM-005: Assign trainer to workshop
 - Steps: Admin Dashboard → Workshops → Create workshop > Assign trainer
 > Set schedule
 - Expected Result: Trainer assigned to workshop successfully
 - o Status: PASS

3.9 Admin Dashboard: Events Management

- **EM-001**: Create new event
 - Steps: Admin Dashboard → Events Management → Create event > Set details and schedule
 - o Expected Result: Event created and listed in calendar
 - Status: PASS
- **EM-002**: View event details
 - Steps: Admin Dashboard → Events Management > Select event
 - Expected Result: Event details displayed correctly
 - o Status: PASS
- **EM-003**: Update event details
 - Steps: Admin Dashboard → Events Management > Select event > Modify details > Save
 - Expected Result: Changes saved and displayed correctly
 - o Status: PASS

• **EM-004**: Delete event

- Steps: Admin Dashboard → Events Management > Select event > Delete > Confirm
- o Expected Result: Event removed from system
- Status: PASS

3.10 Admin Dashboard: Resources Management

- **RSC-001**: Create resource
 - Steps: Admin Dashboard → Resources Management → Create resource > Set details
 - o Expected Result: Resource created and available
 - Status: PASS
- **RSC-002**: View resource details
 - Steps: Admin Dashboard → Resources Management > Select resource
 - o Expected Result: Resource details displayed correctly
 - Status: PASS
- **RSC-003**: Update resource
 - Steps: Admin Dashboard → Resources Management > Select resource > Modify details > Save
 - Expected Result: Changes saved and displayed correctly
 - Status: PASS
- **RSC-004**: Delete resource
 - Steps: Admin Dashboard → Resources Management > Select resource > Delete > Confirm
 - o Expected Result: Resource removed from system
 - Status: PASS
- **RSC-005**: Resource categorization
 - Steps: Select resource > Assign categories > Save changes
 - Expected Result: Resource appears in correct categories
 - o Status: PASS
- **RSC-006**: Process resource requests (Admin)
 - $\circ \quad \text{Steps: Admin Dashboard} \rightarrow \text{Resource Requests} > \text{Review requests} > \\ \text{Approve/Reject}$
 - Expected Result: Requests updated and resources allocated accordingly

o Status: PASS

3.11 Admin Dashboard: Analytics Module

- **AN-001**: Dashboard metrics
 - Steps: Admin Dashboard → Analytics > Review metrics
 - Expected Result: Accurate metrics displayed in real-time
 - Status: PASS
- **AN-002**: Application status analytics
 - Steps: Admin Dashboard → Analytics → Application Status
 - Expected Result: Data displayed correctly in charts/graphs
 - Status: PASS
- **AN-003**: Startup status analytics
 - \circ Steps: Admin Dashboard \rightarrow Analytics \rightarrow Startup Status
 - o Expected Result: Data displayed correctly in charts/graphs
 - Status: PASS
- **AN-004**: Resource utilization analytics
 - Steps: Admin Dashboard → Analytics → Resource Utilization
 - Expected Result: Data displayed correctly in charts/graphs
 - Status: PASS
- **AN-005**: Survival rate analytics
 - \circ Steps: Admin Dashboard \rightarrow Analytics \rightarrow Survival Rate
 - Expected Result: Data displayed correctly in charts/graphs
 - Status: PASS
- **AN-006**: Acceptance rate analytics
 - \circ Steps: Admin Dashboard \rightarrow Analytics \rightarrow Acceptance Rate
 - Expected Result: Data displayed correctly in charts/graphs
 - Status: PASS
- **AN-007**: Custom report generation
 - Steps: Admin Dashboard → Reports → Configure custom report > Generate and export
 - Expected Result: Report generated with selected parameters
 - o Status: PASS

4. API Testing

All API endpoints were tested using Swagger UI:

- /auth/register/ (POST): Admin user creation PASS
- /auth/signup/ (POST): Public user registration PASS
- /auth/login/ (POST): User authentication PASS
- /auth/token/refresh/ (POST): Token refresh PASS
- /admin/users/ (GET): Admin user management PASS
- /users/{id}/ (GET, PUT, DELETE): User operations PASS
- /roles/ (GET): List available roles PASS
- /startups/ (GET, POST): List and create startups PASS
- /startups/{id}/ (GET, PUT, DELETE): Startup operations PASS
- /startups/{startup_id}/team/ (GET, POST): Team members PASS
- /startups/{startup_id}/team/{member_id}/ (DELETE): Remove team member -PASS
- /applications/ (GET, POST): List and create applications PASS
- /applications/{id}/ (GET, PUT, DELETE): Application operations PASS
- /applications/{id}/status/ (PUT): Update application status PASS
- /applications/{id}/average-score/ (GET): Get application average score PASS
- /applications/{id}/votes/ (GET): Get application votes PASS
- /applications/{id}/scores/ (GET): Get application scores PASS
- /stages/ (GET, POST): List and create stages PASS
- /stages/{id}/ (GET, PUT, DELETE): Stage operations PASS
- /deliverables/ (GET, POST): List and create deliverables PASS
- /deliverables/{id}/ (GET, PUT, DELETE): Deliverable operations PASS
- /deliverables/{id}/evaluate/ (POST): Evaluate deliverable PASS
- /deliverables/{id}/evaluations/ (GET): Deliverable evaluations PASS
- /resources/ (GET, POST): List and create resources PASS
- /resources/{id}/ (GET, PUT, DELETE): Resource operations PASS
- /resource-requests/ (GET, POST): Resource requests PASS
- /resource-allocations/ (GET, POST): Resource allocations PASS
- /events/ (GET, POST): List and create events PASS
- /events/{id}/ (GET, PUT, DELETE): Event operations PASS
- /jury-evaluations/ (GET, POST): Jury evaluations PASS
- /jury-evaluations/{id}/ (GET, PUT, DELETE): Jury evaluation operations PASS
- /files/upload/ (POST): Upload file PASS
- /files/ (GET): List files PASS
- /files/{id}/ (GET, PUT, DELETE): File operations PASS
- /notifications/ (GET): List notifications PASS
- /notifications/{id}/read/ (PUT): Mark notification as read PASS
- /notifications/{id}/ (DELETE): Delete notification PASS
- /incubation-form/ (GET, POST): List and create incubation forms PASS

- /incubation-form/{id}/ (GET, PUT, DELETE): Incubation form operations PASS
- /incubation-form/{id}/status/ (PUT): Update incubation form status PASS
- /incubation-form/pending/ (GET): List pending incubation forms PASS
- /incubation-form/my-submissions/ (GET): List user's submissions PASS
- /mentors/ (GET): List mentors PASS
- /mentors/create/ (POST): Create mentor PASS
- /mentors/{id}/ (GET, PUT, DELETE): Mentor operations PASS
- /trainers/(GET): List trainers PASS
- /trainers/create/ (POST): Create trainer PASS
- /trainers/{id}/ (GET, PUT, DELETE): Trainer operations PASS
- /analytics/dashboard/ (GET): Dashboard statistics PASS
- /analytics/application-status/ (GET): Application status analytics PASS
- /analytics/startup-status/ (GET): Startup status analytics PASS
- /analytics/resource-utilization/ (GET): Resource utilization analytics PASS
- /analytics/survival-rate/ (GET): Survival rate analytics PASS
- /analytics/acceptance-rate/ (GET): Acceptance rate analytics PASS

5. Additional Testing

5.1 Browser Compatibility

- Chrome (Latest): PASS
- Firefox (Latest): PASS
- Safari (Latest): PASS
- Edge (Latest): PASS
- Mobile Chrome/Safari: In Progress

5.2 Security Testing

- Authentication: PASS
- Authorization/Role-based access: PASS
- Input Validation: PASS
- CSRF Protection: IN PROGRESS
- XSS Prevention: IN PROGRESS

5.3 Performance Testing

- Page Load Time (< 3 seconds): In Progress
- API Response Time (< 500ms): In Progress
- Database Query Speed (< 200ms): PASS

5.4 User Acceptance Testing

• Student registration flow: PASS

• Mentor viewing assigned startups: PASS

• Admin approval of applications: PASS

• Trainer workshop scheduling: PASS

6. Conclusion

Most major functionality has been tested and verified. Some issues identified:

- 1. Application form viewing in admin dashboard needs fixing (AF-003)
- 2. Mentor profile update functionality needs repair (MM-003)
- 3. Some Navigation problems
- 4. Performance metrics not meeting targets, requiring optimization:
 - Page load time exceeding 3 seconds
 - API response time exceeding 500ms
- 5. Mobile compatibility testing is ongoing
- 6. Some security testing aspects (CSRF, XSS) are still in progress