



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

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Section: G

Software Quality Assurance and Testing

Tour and Travel Management System

A Report submitted

By

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Software Test Plan

for

<Project>

Version 1.0 approved

Prepared by <author>

<organization>

<date created>

Checked By Industry Personnel

Name:

Designation:

Company:

Sign:

Date:

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1. TEST PLAN IDENTIFIER:RS-MTP01.3

2. REFERENCES

- Any reference documents with the test plan. For example: Software Requirement Specification (SRS) Document

3. INTRODUCTION

In the highly competitive travel and tourism industry, it is crucial for companies to provide a seamless and enjoyable experience for their customers. A Tours and Travel Management System is an essential tool for companies to manage their operations, bookings, and customer interactions. However, even the most well-designed software can have errors or defects that can affect the user experience and damage the company's reputation. This is where software testing comes in.

Software testing is the process of evaluating a software system or application to ensure that it meets its specified requirements and works as expected. In the context of TTMS, software testing helps to identify any bugs, errors, or inconsistencies that could affect the user's ability to book and manage their travel plans. Testing can also ensure that the TTMS is secure, reliable, and performs well under different scenarios, such as high user traffic or unexpected downtime.

Background to the Problem

- Managing manually at a relatively low processing rate.
- Managing a travel management system manually can be a time-consuming process.
- Managing a travel management system manually can be inefficient, as it requires a lot of manual labor.
- Manual processes can be inefficient, resulting in delays, redundancies, and inconsistencies.

Solution to the Problem

- Improve efficiency of all processes and increase staff access to their job for improved outcomes.
- Save time and ensure error free operations.
- Improve efficiency and increase work volume capacity.
- Better Collaboration & Communication.

4. REQUIREMENT SPECIFICATION

4.1 System Features

1. System Login
 - The software shall allow users to login with their given username and password.

- If the username and/or password has been inserted wrong for more than three times, the random verification code will be generated by the system to retry login.
- If the number of login attempt exceed its limit (5 times), the system shall block the user account login for one hour.

Priority Level: High

Precondition: user have valid user id and password

2. System Registration

- The software shall allow users to register with their name, email, username, password, phone number.
- If the username is already used in the system, the system shall give an error message.
- Without provided valid username, email or phone number, the user shall not register.

Priority Level: High

Precondition: user must provide proper information

3. User can edit and update profile

- The software shall allow users to update and delete profile information.
- The system shall store the updated information of the users.

Priority Level: Medium

Precondition: user must update profile with valid information.

4. Admin can add, update and delete package information

- The software shall allow admin to add, update and delete package information.
- The system shall store the updated information of the packages.
- If the package already exists, system shall give warning.

Priority Level: Medium

Precondition: Admin must add packages with detailed information.

5. Admin can assign manager

- The software shall allow admin to add manager to manage the packages.
- The system shall store the information of the manager.

Priority Level: Medium

Precondition: Admin must give major access to manager.

6. User can order packages with online payment

- The software shall allow users to order packages and make payment online.

Priority Level: Medium

Precondition: User must provide valid payment information.

7. User can rate the service

- The software shall allow user to give ratings and feedback.
- The ratings of the packages shall be updated in the system.

Priority Level: Medium

Precondition: Users must give ratings between 1 to 5 stars.

4.2 System Quality Attributes

- **Security:** It is secured and prevented from the exposure of system hacking.
- **Reliability:** The system can provide service 24/7
- **Usability:** It is quite easy for both the admin panel and customer panel operate this software.
- **Efficiency:** A 64-bit operating system like Windows 10 or later and 4 GB RAM or more.
- **Maintainability:** There should be scope for system change amplification and correction in any emerging situation. A maintenance programmer shall be able to modify existing feature to make change or correct any feature.

4.3 System Interface

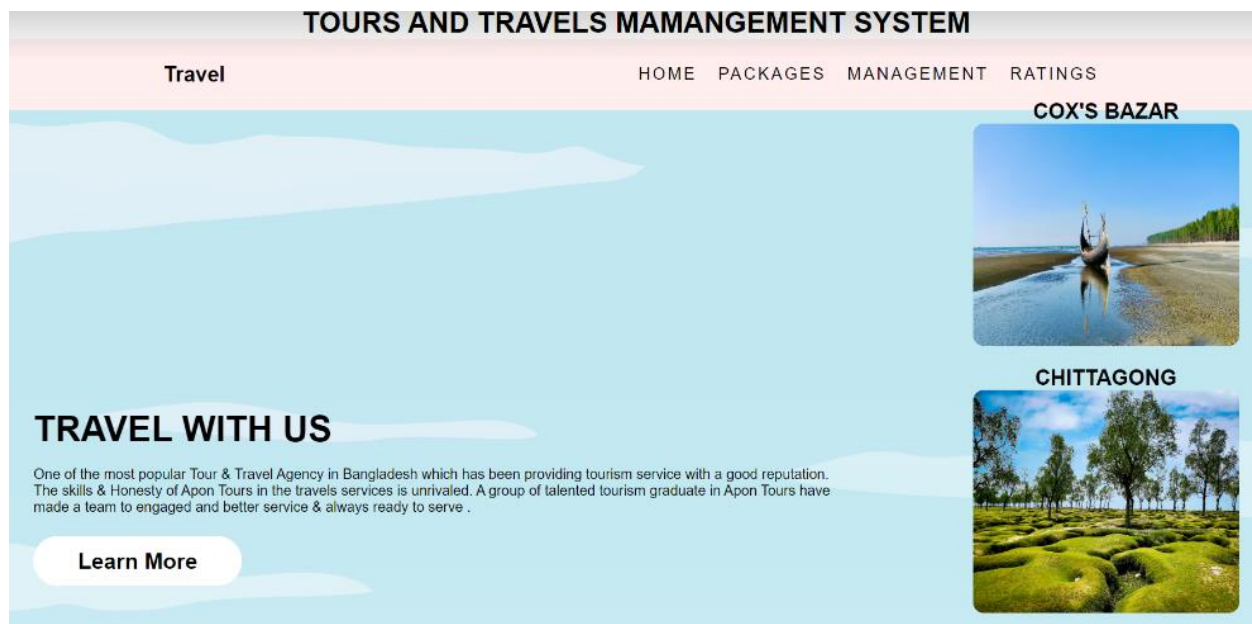


Figure 1: Home page

Tour and Travels Management System

General

First Name

Last Name

Username

Him

Password

Confirm Password

Gender

☐ Male ☐ Female

Contact

Email

Mobile no

Address

Street/House/Road

Country

Bangladesh

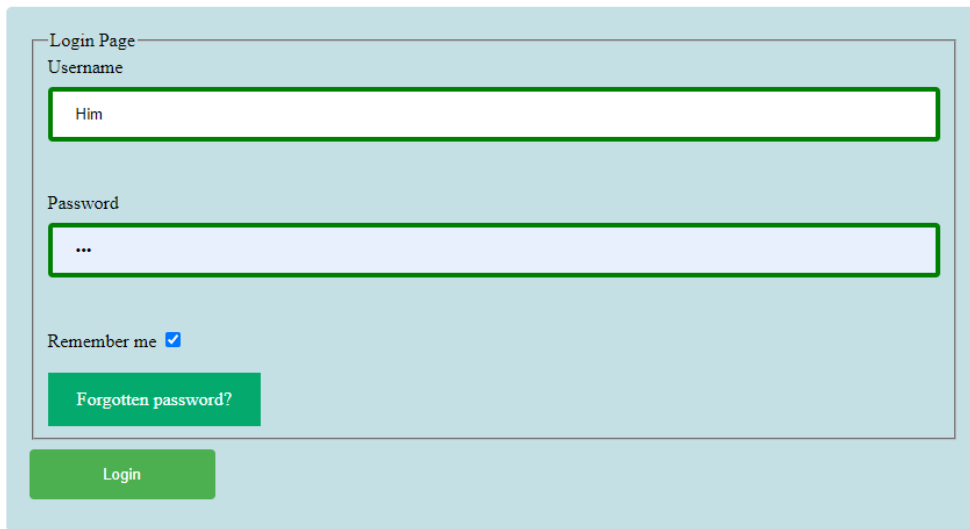
Register

Already have an account?

Login

Figure 2: Registration Module of the System

Tour and Travels Management System



The login page features a light blue background. A white box with a thin grey border contains the login fields. At the top of this box is the title 'Login Page'. Below it, the 'Username' label is followed by a text input field containing 'Him'. The 'Password' label is followed by a text input field containing three dots. Below the password field is a 'Remember me' checkbox which is checked. A green button labeled 'Forgotten password?' is positioned to the right of the 'Remember me' checkbox. Below the white box is a green button labeled 'Login'.

Login Page

Username

Him

Password

...

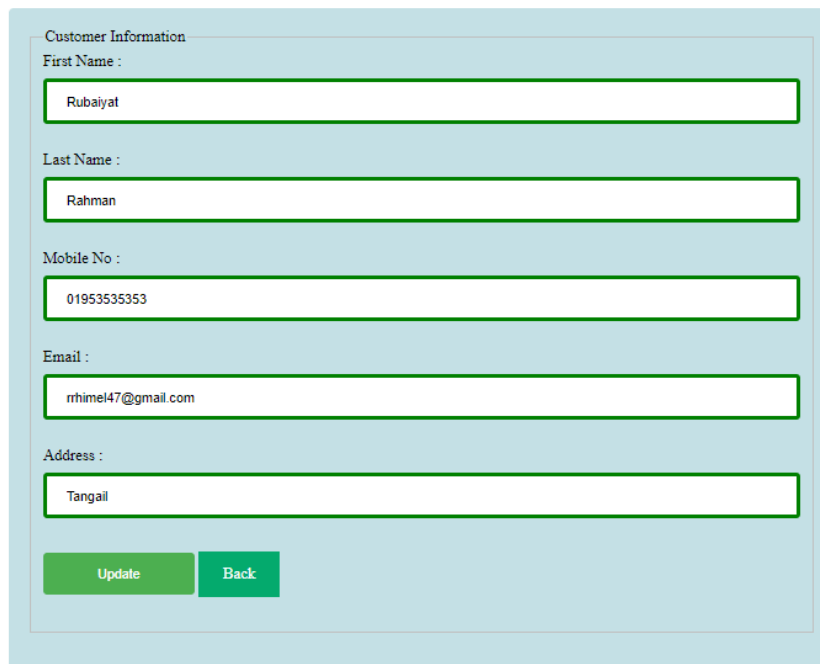
Remember me ☒

Forgotten password?

Login

Figure 3: Login Module of the System

Tour and Travels Management System



The user profile page has a light blue background. A white box with a thin grey border contains the form. The title 'Customer Information' is at the top. Below it are five text input fields with labels: 'First Name :', 'Last Name :', 'Mobile No :', 'Email :', and 'Address :'. The fields contain the values 'Rubaiyat', 'Rahman', '01953535353', 'rrhimel47@gmail.com', and 'Tangail' respectively. At the bottom of the white box are two green buttons: 'Update' and 'Back'.

Customer Information

First Name :

Rubaiyat

Last Name :

Rahman

Mobile No :

01953535353

Email :

rrhimel47@gmail.com

Address :

Tangail

Update Back

Figure 4: User Profile Module

Tour and Travels Management System

Package List :				
Package Name	Hotel Name	Location	Cost	Rating
bandarban	bandarban	bandarban	5000	4.8
CoxBazar	Seagul	coxbazar	5000	4.5
Sylhet	Grand sultan	Sylhet	5000	4.8

Compare

Search

Back

Logout

Figure 5: Package Lists

Tour and Travels Management System

Add Package

Package Information

Package Name

Hotel Name

Location

Cost

Rating

Add

Figure 6: Admin Add Package Module

Tour and Travels Management System

Package Name	Hotel Name	Location	Cost	Rating	Order
bandarban	bandarban	bandarban	5000	4.8	Click here
CoxBazar	Seagul	coxbazar	5000	4.5	Click here
Sylhet	Grand sultan	Sylhet	5000	4.8	Click here

[Go back](#)[Logout](#)

Figure 7: Order Package Module

Tour and Travels Management System

You have ordered a package

Package Information

Package name : bandarban

Hotel Name : bandarban

Location : bandarban

Cost : 5000

Rating : 4.8

[Cancel](#)[Make Payment](#)

Figure 8: Package Information Module

Tour and Travels Management System

Give Rating

General

Package Name : Cox's Bazar

Hotel Name : Seagul

Location : Cox's Bazar

Cost : 5000

Give ratings ☐ 1* ☐ 2* ☐ 3* ☐ 4* ☐ 5*

Confirm

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Figure 9: Ratings and Feedback Module

4.4 Project Requirements

Environment & resource needs

- Microsoft Windows 7 with Service Pack 1 or higher.
- Intel Core i3 or higher. (The 7 th generation)
- 4 GB of RAM (minimum).
- 128 GB of free disk space for installation, plus extra space for temporary files during test runs.
- Mouse and keyboard.

Software Requirements:

- Automated Testing tool: selenium.
- Web Browsers: Internet Explorer/ Mozilla Firefox/ Google Chrome.
- Database: MySQL 5.7.12, 8.0.12+ (see note below on MySQL 8 support. PostgreSQL 10.0+.
- Eclipse/Microsoft Visual Studio, /Microsoft Visual Studio code.
- AS/400

Effort Estimation:

We used COCOMO model for project estimation. The type of the developed product is Semi-detached. So, coefficient=3.0, P=1.12, T=0.35, SLOC=20000

$$\text{Effort} = \text{PM} = \text{Coefficient} * (\text{SLOC}/1000) ^ P$$

$$= 3.0 * (20000/1000) ^ {1.12}$$

$$= 86 \text{ person months}$$

$$\text{Development Time} = \text{DM} = 2.50 * (\text{PM}) ^ T$$

$$= 2.50 * (86) ^ {0.35}$$

$$= 12\text{-week days}$$

$$\text{Required number of people} = \text{ST} = \text{PM}/\text{DM}$$

$$= 86/12 = 7.17 = 8$$

Budget Estimation:

$$\text{Duration weeks} = 12 \text{ weeks}$$

$$\text{Week days} = 5 \text{ days}$$

$$\text{Working hours} = 8 \text{ Hours}$$

$$\begin{aligned} \text{Per week working hours is} &= (5*8) \text{ hours} \\ &= 40 \text{ hours} \end{aligned}$$

$$\begin{aligned} \text{Total Working hours is} &= (40*12) \text{ hours} \\ &= 480 \text{ hours.} \end{aligned}$$

$$\text{Developer salary per hour} = 500 \text{ BDT}$$

$$\begin{aligned} \text{Total developers Salary} &= (500*480*8) \text{ BDT} \\ &= 1,920,000 \text{ BDT} \end{aligned}$$

<u>Expanse</u>	Amount	Total Amount
Salary for team		1,920,000 BDT
3 months office rent	3*10000	30,000 BDT
Electricity and othercosts		20,000 BDT

1 months Maintenancecost	$5 \times 10 \times 1200$	60,000 BDT
Travel Cost	1×5000	5,000 BDT
Total Cost		2,035,000 BDT
15% of total cost(profit)		305,250 BDT
Now total budget is		2,340,250 BDT

- List down the project constraints (e.g. time, budget, resources, environment, etc.) that should be followed in the project management.
- **Example:** Total budget 3,60,000 BDT (Calculate proper budget estimation)
Total Development Time 1 year 3 months (Calculate proper time estimation)

5. FEATURES NOT TO BE TESTED

The following is a list of the areas that will not be specifically addressed. All testing in these areas will be indirect as a result of other testing efforts. For example:

- PC based spreadsheet analysis applications using Reassigned Sales data. Because these applications are completely under the control of the customer and are outside the scope of this project. The necessary data base format information will be provided to the customers to allow them to extract data. Testing of their applications is the responsibility of the application maintainer/developer.

6. TESTING APPROACH

6.1 Testing Levels

- The testing for the SMS project will consist of Unit, System/Integration (combined) and Acceptance test levels. It is hoped that there will be at least one full time independent test person for system/integration testing. However, with the budget constraints and timeline established; most testing will be done by the test manager with the development teams' participation.
- UNIT Testing will be done by the developer and will be approved by the development team leader. Proof of unit testing (test case list, sample output, data printouts, defect information) must be provided by the programmer to the team leader before unit testing will be accepted and passed on to the test person. All unit test information will also be provided to the test person.
- SYSTEM/INTEGRATION Testing will be performed by the test manager and development team leader with assistance from the individual developers as required. No specific test tools are available for this project. Programs will enter into System/Integration test after all critical defects have been corrected. A program may have up to two Major defects as long as they do not impede testing of the program (I.E. there is a work around for the error).

- ACCEPTANCE Testing will be performed by the actual end users with the assistance of the test manager and development team leader. The acceptance test will be done in parallel with the existing manual ZIP/FAX process for a period of one month after completion of the System/Integration test process.

6.2 Test Tools

The only test tools to be used are the standard AS/400 provided utilities and commands.

- The Program Development Manager (PDM) will be used as the source version configuration management tool in conjunction with the in-house check-in/check-out control utility. The check-in/out utility is part of each developer's standard AS/400 access menu.
- The initial prototypes for the new screens will be developed using the AS/400 Screen Design Aid (SDA). The initial layout and general content of the screens will be shown to the sales administration staff prior to proceeding with testing and development of the screens.

6.3 Meetings

The test team will meet once in every week to evaluate progress to date and to identify error trends and problems as early as possible. The test team leader will meet with development and the project manager once every two weeks as well. These two meetings will be scheduled on different weeks. Additional meetings can be called as required for emergency situations.

7. TEST CASES/TEST ITEMS

Project Name: Tour and Travel Management System		Test Design by:wahid sadik,Azizul Hakim		
Test case ID:FTM033		Test Designed date: 20.4.2023		
Test Priority (Low,Medium,High): High		Test Executed by:Rubaiyat Rahman, Simanto Podder		
Module Name: Login Session		Test Executed date:25.4.2023		
Test Title: verify login with valid username and password				
Description: Test TTM Login page				
Precondition: Valid username and password in system Database				
Test steps	Test Data	Expected Result	Actual Results	Status (Pass/Fail)
1. Go to website 2. Enter username 3. Enter password 4. Click submit	Username:sadik73 Password:12345@sadik	User should login into the admin dashboard the application	As expected	Pass
Post Condition: User is validated with database and successfully login to account				

Project Name: Tour and Travel Management System			Test Design by:wahid sadik,Azizul Hakim	
Test case ID:FTM04			Test Designed date: 20.4.2023	
Test Priority (Low,Medium,High): High			Test Executed by:Rubaiyat Rahman, Simanto Podder	
Module Name:Test sign up page			Test Executed date:25.4.2023	
Test Title:Verify sign up				
Description: Test TTM sign up				
Precondition:User must filled all required fields				
Test steps	Test Data	Expected Result	Actual Results	Status (Pass/Fail)
1. user go to website 2. Go the sign up page 3. Filed required fields 4. Click sign up	Name:wahid sadik Username:sadik73 Email:wahidsadi011@gmail.com Password:12345@sadik	User go the login page	As expected	Pass
Post Condition:The user successfully sign up with the system				

Project Name: Tour and Travel Management System			Test Design by:wahid sadik,Azizul Hakim		
Test case ID:FTM05			Test Designed date: 20.4.2023		
Test Priority (Low,Medium,High): Medium			Test Executed by:Rubaiyat Rahman,Simanto Podder		
Module Name:verify search package			Test Executed date:25.4.2023		
Test Title:TMM Dashbroad search					
Description:Search offer package					
Precondition:user search by word and show all offer package					
Test steps	Test Data	Expected Result	Actual Results	Status (Pass/Fail)	
1. Go the website 2. search in search box 3. Click search button	Search:thailan d package	Show all Thailand package	As expected	Pass	
Post Condition:user successfully get search result					

Project Name:Tour and Travel Management System			Test Design by:wahid sadik,Azizul Hakim		
Test case ID:FTM06			Test Designed date: 21.4.2023		
Test Priority (Low,Medium,High): Medium			Test Executed by:Rubaiyat Rahman,Simanto Podder		
Module Name:verify update profile			Test Executed date:27.4.2023		
Test Title:TMM user update profile					
Description: user profile update					
Precondition:user update his information successfully					
Test steps	Test Data	Expected Result	Actual Results	Status (Pass/Fail)	
1. Go the website 2.login his profile 3.go to his profile 4.click update profile	Name:sadik wahid Email:wahidsa dik@gmail.com Username:wahid73 Password:	User information update successfully	As expected	Pass	
Post Condition:user successfully get search result					

8. TEST DELIVERABLES

Item is considered as passed if it passes 95% of test cases of the test suite. Other it's considered a failure.

9. TEST DELIVERABLES

The following will be delivered ☐

- Test Plan
- Test Cases
- Test Scripts
- Test Data
- Execution Log
- Defect Report
- Test Summary Report
- Screen prototypes

10. STAFFING AND TRAINING NEEDS

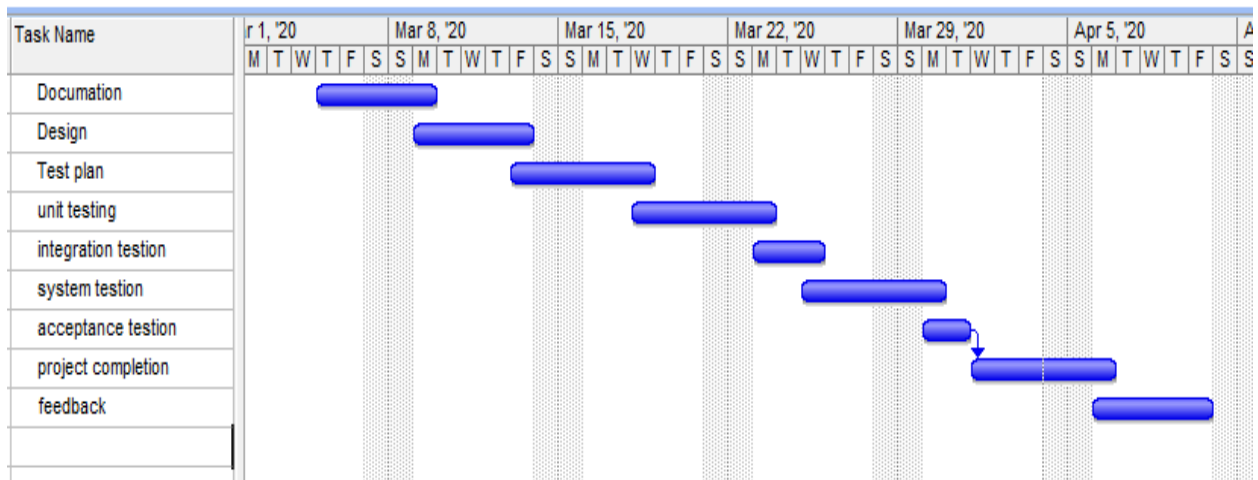
Two full time professional experienced tester required for this project. Each of them trains a batchconsist of five testers for this project.

11. RESPONSIBILITIES

Responsibility	Name
Test Plan Verification	RUBAIYAT RAHMAN, Simanto Podder
Preparing The Test Cases	Simanto Podder, Wahid Sadik, Azizul Hakim
Unit Test Documentation &Execution	Wahid Sadik, Rubaiyat Rahman
Acceptance Test Documentation	Simanto Podder, Wahid Sadik
Validating Project changes	Azizul Hakim, Rubaiyat Rahman, Wahid sadik
System Test and Control Changing	Rubaiyat Rahman

12. TESTING SCHEDULE

Time has been allocated within the project plan for the following testing activities. The specific dates and times for each activity are defined in the project plan timeline. The persons required for each process are detailed in the project timeline and plan as well. Coordination of the personnel required for each task, test team, development team, management and customer will be handled by the project manager in conjunction with the development and test team leaders. Schedule must be done using any PM tool.



13. PLANNING RISKS AND CONTINGENCIES

- Limited Reassigned Sales staff. The Reassigned Sales administration staff currently has two positions unfilled. As a result of this staff shortage there may be delays in getting staff to review appropriate documents and to participate in the Acceptance test process. Should client staff become a problem, the appropriate dates for reviews and acceptance testing will slip accordingly. No attempt will be made to bypass any part of the review and testing processes.

14. APPROVALS

Project Sponsor - Steve Sponsor	
Development Management - Ron Manager	
EDI Project Manager - Peggy Project	
RS Test Manager - Dale Tester	
RS Development Team Manager - Dale Tester	
Reassigned Sales - Cathy Sales	
Order Entry EDI Team Manager - Julie Order	