- **Test Case :** A test case has components that describe input, action, and an expected response, in order to determine if a feature of an application works correctly.

  A test case is a set of instructions on "HOW" to validate a particular test objective/target, which, when followed will tell us if the expected behavior of the system is satisfied or not. The basic objective of writing cases is to validate the test coverage of an application. One of the most frequent and major activities of a Software Tester (SQA/SQC person) is to write Test scenarios and cases.

- **Bug in Software :** . A software bug is an error, flaw, or fault in an application. This error causes the application to produce an unintended or unexpected result, such as crashing or producing invalid results.

- **Bug report :** A Bug Report in Software Testing is a detailed document about bugs found in the software application. Bug report contains each detail about bugs like description, date when bug was found, name of tester who found it, name of developer who fixed it, etc. Bug report helps to identify similar bugs in future so it can be avoided.

Test Automation

1.

Project Name: **Lost Item Tracker Device**			Test Designed by: **Group-3**	
Test Case: B-1			Test Designed date: 10.11.22	
Test Priority (Low, Medium, High): Medium			Test Executed by: **Ifthekar**	
Module Name: Registration session			Test Execution date: 10.12.22	
Test Title: Create a new account using required data.				
Description: Test application registration system.				
Precondition (If any): User must enter valid email address, username should be available, password should be a strong password (at least 8 chars, including one at least Uppercase latter and one at least special character)				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go Home Page 2. Go to Registration Window 3. Enter username 4. Enter password 5. Enter Email 6. Enter Address 7. Enter Phone (optional) 8. Verify CAPTCHA 9. Click Registration 10. Enter OTP from email 11. Click on Profile link	Username: test_user20 Password: User20@789 Email: User20@gmail.com Address: Dhaka, Bangladesh	User data should be store to the database, after click registration user should get OTP on his email. After enter valid OTP user should be able to go to his profile.	As expected,	Pass
Post Condition: User is validated with database and successfully created a new account. The account session details are saved in the database.				

BUG REPORT

2.

Project Name: **Lost Item Tracker Device**			Test Designed by: **Group-3**	
Test Case: B-2			Test Designed date: 10.11.22	
Test Priority (Low, Medium, High): Medium			Test Executed by: **Ifthekar**	
Module Name: Login Session			Test Execution date: 10.12.22	
Test Title: Verify login with valid data.				
Description: Test Application login system.				
Precondition (If any): User must have valid email address or username and password.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the home page 2. Go to Login Window 3. Enter username or mail 4. Enter password 5. Click Login Button	Username: test_user20 Password: User20@789 Email: User20@gmail.com	User login successfully using valid User name or Email and password	As expected,	Pass
Post Condition: User login successfully to given required information.				

BUG REPORT

3.

Project Name: **Lost Item Tracker Device**			Test Designed by: **Group-3**	
Test Case: B-3			Test Designed date: 17.11.22	
Test Priority (Low, Medium, High): High			Test Executed by: **Ifthekar**	
Module Name: Profile edit			Test Execution date: 11.12.22	
Test Title: Change or edit profile				
Description: User change given profile information.				
Precondition (If any): User can't change user name and id.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the homepage 2. Go to Login 3. Profile 4. Edit	Change profile information.	Save all changing information and show in profile.	Unexpected,	Fail
Post Condition: User can see modified information in profile after edit profile.				

BUG REPORT

4.

Bug Name: Application can’t show modified information after edit information.	
Bug ID: (It will be automatically created by the BUG Tracking tool once you save this bug).	
Area Path: Login □profile □Save	
Build Number: Version Number 3.0.1	
Severity: Medium (High/Medium/Low)	**Priority:** Low (High/Medium/Low) or 1
Assigned to: Group-4 members	**Reported By: Ifthekar**
Reason: Defect	**Reported On:** 27/11/2022
Status: New/Open/Active: New	**Environment:** Windows 11/SQL Server 2014
Description: Application can’t show modified information after edit information, hence unable to change information or edit new information in the application.	
Steps to Reproduce: 1. Login into the Application. 2. Go profile 3. Edit 4. Navigate to the all information ◊edit information 5. Save 6. Seen an error page “ Exception: Insert values Error…” 7. See the attached logs for more information (Attach more logs related to the bug…IF any) 8. Also see the attached screenshot of the error page.	
Expected Result: On clicking the SAVE button, you should be prompted to a successful message “New information has been edit successfully” and new information show in profile.	

BUG REPORT

5.

Project Name: **Lost Item Tracker Device**			Test Designed by: **Group-3**	
Test Case: B-4			Test Designed date: 25.11.22	
Test Priority (Low, Medium, High): Medium			Test Executed by: **Ifthekar**	
Module Name: change password			Test Execution date: 11.12.22	
Test Title: change new password and create new password				
Description: Test Application Add New password				
Precondition (If any): User check password details				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the homepage 2. Go to Login 3. Go to Forgot password 4. Enter the user name 5. Verify captcha 6. Enter email 7. Enter Phone optional 8. OTP from email 9. Enter New password 10. Confirm new password 11. Go to the Finish	Change password and create a new password	After finishing password device will be secure	Unexpected,	Fail
Post Condition: User can change new password				

BUG REPORT

6.

Project Name: **Lost Item Tracker Device**			Test Designed by: **Group-3**	
Test Case: B-5			Test Designed date: 25.11.22	
Test Priority (Low, Medium, High): Medium			Test Executed by: **Ifthekar**	
Module Name: Add locate items			Test Execution date: 11.12.22	
Test Title: Add locate items session in specific time.				
Description: Test Application Add located system.				
Precondition (If any): User check device details,and located item for notification.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the homepage 2. Go to Login 3. Enter the password 4. Enter lost item 5. Details about lost item 6. Select lost item location 7. Select lost item date 8. Select lost item time 9. Go to the Finish	device details and location time.	Save all information in database and set a notification.	Unexpected,	Fail
Post Condition: User can add lost device details and session.				

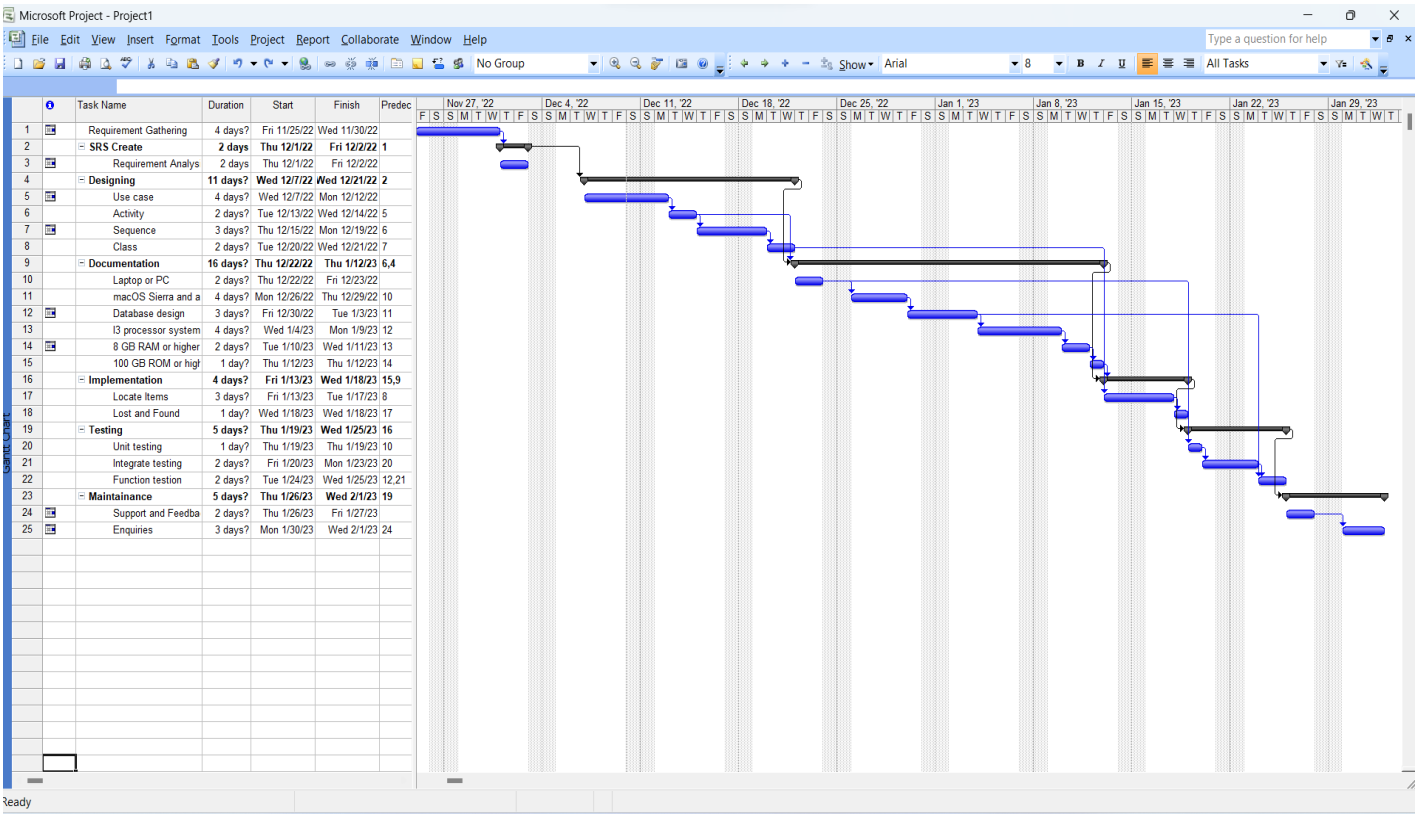
BUG REPORT

7.

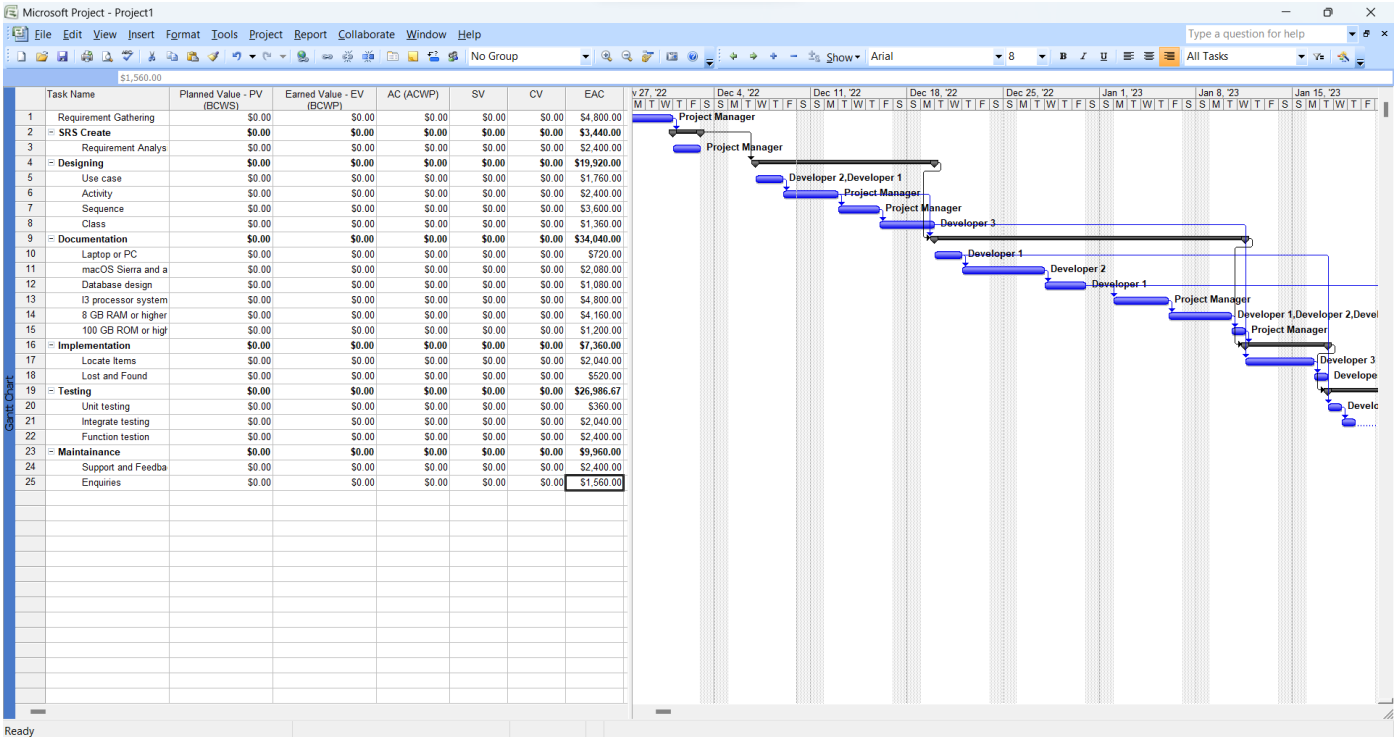
Bug Name: Application crashes upon clicking the SAVE button while creating a new doctor session.	
Bug ID: (It will be automatically created by the BUG Tracking tool once you save this bug).	
Area Path: Login □Add lost item □Save	
Build Number: Version Number 2.0.1	
Severity: HIGH (High/Medium/Low) or 1	**Priority:** HIGH (High/Medium/Low) or 1
Assigned to: Group-4 members	**Reported By: Athoy**
Reason: Defect	**Reported On:** 11/25/2022
Status: New/Open/Active: New	**Environment:** Windows 11/SQL Server 2014
Description: Application crashes upon clicking the SAVE button while creating a new lost item with session, hence unable to create a new doctor session in the application.	
Steps to Reproduce: 1. Login into the Application. 2. Go lost item 3. Navigate to the lost device details and location time □ New page 4. Select lost device and location time 5. Clicked on Save button 6. Seen an error page “ Exception: Insert values Error…” 7. See the attached logs for more information (Attach more logs related to the bug…IF any) 8. Also see the attached screenshot of the error page.	
Expected Result: On clicking the SAVE button, you should be prompted to a successful message “New Session has been created successfully”.	

WBS and Effort Estimation :

Estimation in software engineering refers to an endeavor to estimate the cost, time, and effort necessary to develop a certain software-based system. It helps the project manager in making more accurate predictions about the time and effort required to complete the project.



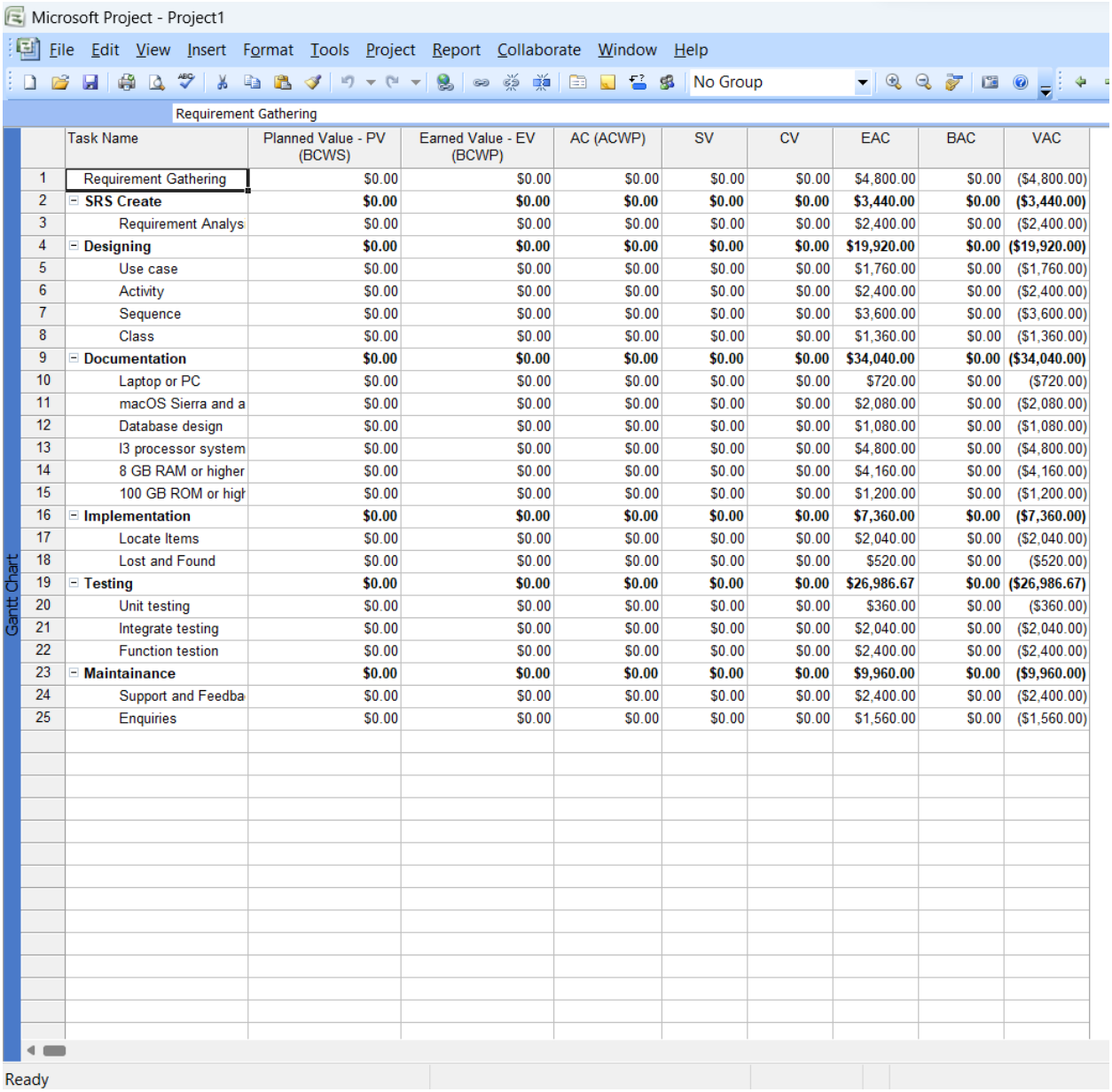
	Task Name	Duration	Start	Finish	Predec
1	Requirement Gathering	4 days?	Fri 11/25/22	Wed 11/30/22	
2	**SRS Create**	**2 days**	**Thu 12/1/22**	**Fri 12/2/22**	**1**
3	Requirement Analys	2 days	Thu 12/1/22	Fri 12/2/22	
4	**Designing**	**11 days?**	**Wed 12/7/22**	**Wed 12/21/22**	**2**
5	Use case	4 days?	Wed 12/7/22	Mon 12/12/22	
6	Activity	2 days?	Tue 12/13/22	Wed 12/14/22	5
7	Sequence	3 days?	Thu 12/15/22	Mon 12/19/22	6
8	Class	2 days?	Tue 12/20/22	Wed 12/21/22	7
9	**Documentation**	**16 days?**	**Thu 12/22/22**	**Thu 1/12/23**	**6,4**
10	Laptop or PC	2 days?	Thu 12/22/22	Fri 12/23/22	
11	macOS Sierra and a	4 days?	Mon 12/26/22	Thu 12/29/22	10
12	Database design	3 days?	Fri 12/30/22	Tue 1/3/23	11
13	I3 processor system	4 days?	Wed 1/4/23	Mon 1/9/23	12
14	8 GB RAM or higher	2 days?	Tue 1/10/23	Wed 1/11/23	13
15	100 GB ROM or higl	1 day?	Thu 1/12/23	Thu 1/12/23	14
16	**Implementation**	**4 days?**	**Fri 1/13/23**	**Wed 1/18/23**	**15,9**
17	Locate Items	3 days?	Fri 1/13/23	Tue 1/17/23	8
18	Lost and Found	1 day?	Wed 1/18/23	Wed 1/18/23	17
19	**Testing**	**5 days?**	**Thu 1/19/23**	**Wed 1/25/23**	**16**
20	Unit testing	1 day?	Thu 1/19/23	Thu 1/19/23	10
21	Integrate testing	2 days?	Fri 1/20/23	Mon 1/23/23	20
22	Function testion	2 days?	Tue 1/24/23	Wed 1/25/23	12,21
23	**Maintainance**	**5 days?**	**Thu 1/26/23**	**Wed 2/1/23**	**19**
24	Support and Feedba	2 days?	Thu 1/26/23	Fri 1/27/23	
25	Enquiries	3 days?	Mon 1/30/23	Wed 2/1/23	24



	Task Name	Planned Value - PV (BCWS)	Earned Value - EV (BCWP)	AC (ACWP)	SV	CV	EAC
1	Requirement Gathering	$0.00	$0.00	$0.00	$0.00	$0.00	$4,800.00
2	**SRS Create**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$3,440.00**
3	Requirement Analys	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00
4	**Designing**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$19,920.00**
5	Use case	$0.00	$0.00	$0.00	$0.00	$0.00	$1,760.00
6	Activity	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00
7	Sequence	$0.00	$0.00	$0.00	$0.00	$0.00	$3,600.00
8	Class	$0.00	$0.00	$0.00	$0.00	$0.00	$1,360.00
9	**Documentation**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$34,040.00**
10	Laptop or PC	$0.00	$0.00	$0.00	$0.00	$0.00	$720.00
11	macOS Sierra and a	$0.00	$0.00	$0.00	$0.00	$0.00	$2,080.00
12	Database design	$0.00	$0.00	$0.00	$0.00	$0.00	$1,080.00
13	I3 processor system	$0.00	$0.00	$0.00	$0.00	$0.00	$4,800.00
14	8 GB RAM or higher	$0.00	$0.00	$0.00	$0.00	$0.00	$4,160.00
15	100 GB ROM or higl	$0.00	$0.00	$0.00	$0.00	$0.00	$1,200.00
16	**Implementation**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$7,360.00**
17	Locate Items	$0.00	$0.00	$0.00	$0.00	$0.00	$2,040.00
18	Lost and Found	$0.00	$0.00	$0.00	$0.00	$0.00	$520.00
19	**Testing**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$26,986.67**
20	Unit testing	$0.00	$0.00	$0.00	$0.00	$0.00	$360.00
21	Integrate testing	$0.00	$0.00	$0.00	$0.00	$0.00	$2,040.00
22	Function testion	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00
23	**Maintainance**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$9,960.00**
24	Support and Feedba	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00
25	Enquiries	$0.00	$0.00	$0.00	$0.00	$0.00	$1,560.00

Cost Estimation:

Total resource cost = $460
Employee's salary: Developer = (2 x $140) = $280
Project manager = $220
Testing and maintenance = $420
Total salary: ($280 + $220 + $420) = $920
Total cost : ($460 + $920) = $1380 (per month)



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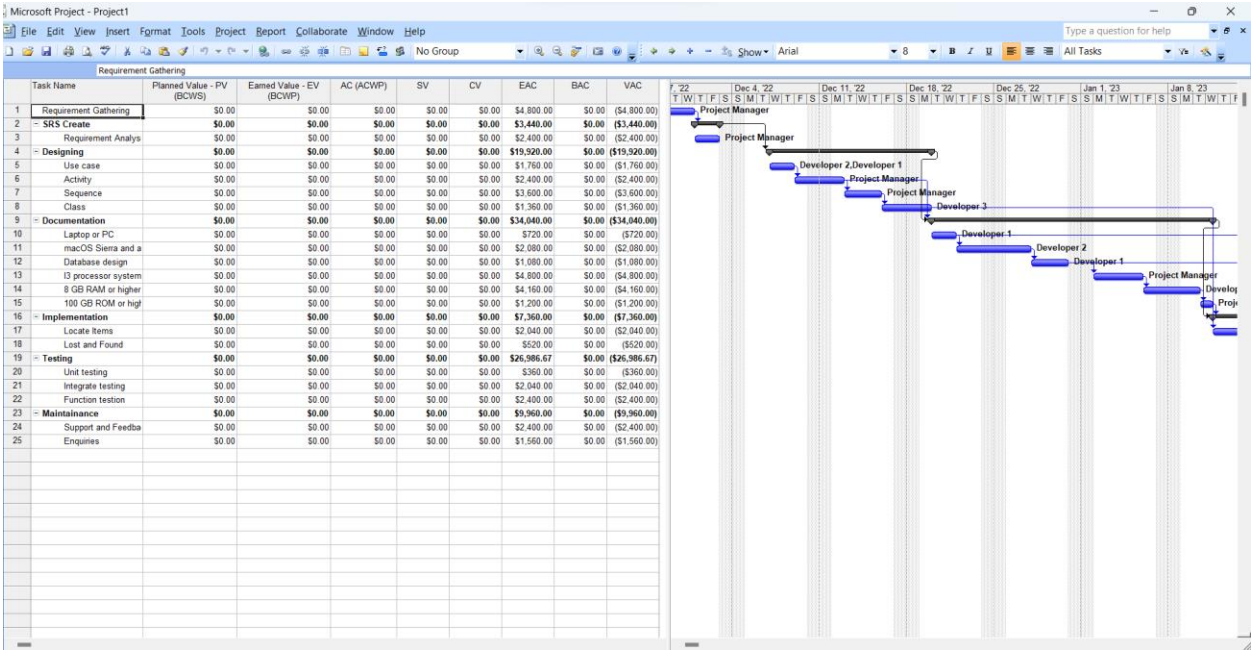
2	**SRS Create**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$3,440.00**	**$0.00**	**($3,440.00)**
3	Requirement Analys	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
4	**Designing**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$19,920.00**	**$0.00**	**($19,920.00)**
5	Use case	$0.00	$0.00	$0.00	$0.00	$0.00	$1,760.00	$0.00	($1,760.00)
6	Activity	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
7	Sequence	$0.00	$0.00	$0.00	$0.00	$0.00	$3,600.00	$0.00	($3,600.00)
8	Class	$0.00	$0.00	$0.00	$0.00	$0.00	$1,360.00	$0.00	($1,360.00)
9	**Documentation**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$34,040.00**	**$0.00**	**($34,040.00)**
10	Laptop or PC	$0.00	$0.00	$0.00	$0.00	$0.00	$720.00	$0.00	($720.00)
11	macOS Sierra and a	$0.00	$0.00	$0.00	$0.00	$0.00	$2,080.00	$0.00	($2,080.00)
12	Database design	$0.00	$0.00	$0.00	$0.00	$0.00	$1,080.00	$0.00	($1,080.00)
13	I3 processor system	$0.00	$0.00	$0.00	$0.00	$0.00	$4,800.00	$0.00	($4,800.00)
14	8 GB RAM or higher	$0.00	$0.00	$0.00	$0.00	$0.00	$4,160.00	$0.00	($4,160.00)
15	100 GB ROM or higl	$0.00	$0.00	$0.00	$0.00	$0.00	$1,200.00	$0.00	($1,200.00)
16	**Implementation**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$7,360.00**	**$0.00**	**($7,360.00)**
17	Locate Items	$0.00	$0.00	$0.00	$0.00	$0.00	$2,040.00	$0.00	($2,040.00)
18	Lost and Found	$0.00	$0.00	$0.00	$0.00	$0.00	$520.00	$0.00	($520.00)
19	**Testing**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$26,986.67**	**$0.00**	**($26,986.67)**
20	Unit testing	$0.00	$0.00	$0.00	$0.00	$0.00	$360.00	$0.00	($360.00)
21	Integrate testing	$0.00	$0.00	$0.00	$0.00	$0.00	$2,040.00	$0.00	($2,040.00)
22	Function testion	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
23	**Maintainance**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$9,960.00**	**$0.00**	**($9,960.00)**
24	Support and Feedba	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
25	Enquiries	$0.00	$0.00	$0.00	$0.00	$0.00	$1,560.00	$0.00	($1,560.00)

Activity Scheduling and Resource Allocation:

Activity Scheduling:

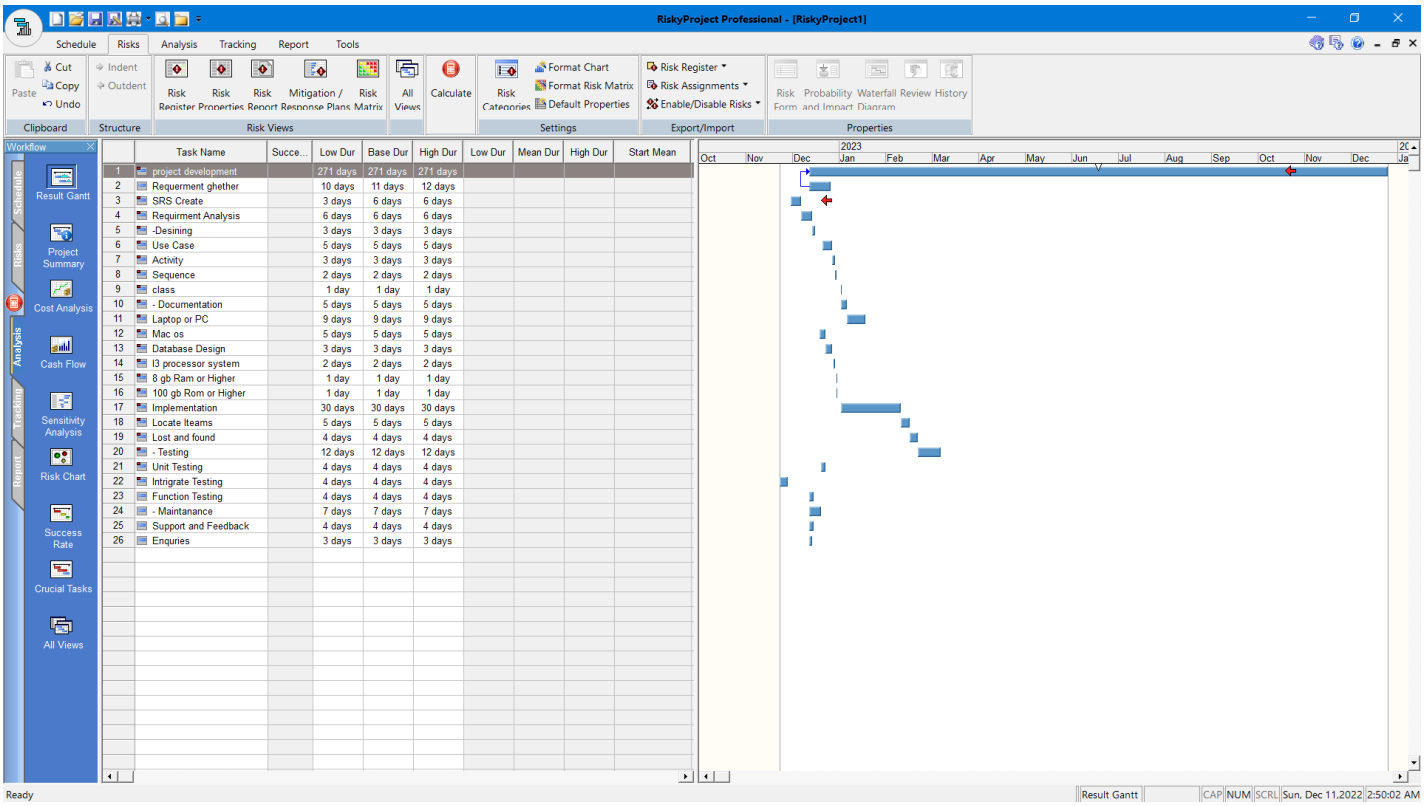
Name	Duration	Starting Date	Ending date
Project purpose	10 days	10/8/2022	20/8/2022
Software Lifestyle	3 days	23/8/2022	26/8/2022
Design Diagram	12 days	27/8/2022	07/9/2022
Development	10 days	13/9/2022	23/9/2022
Testing	1 week	18/9/2022	24/9/2022
Maintainance	1 week	25/9/2022	1/10/2022

Resource Allocation:

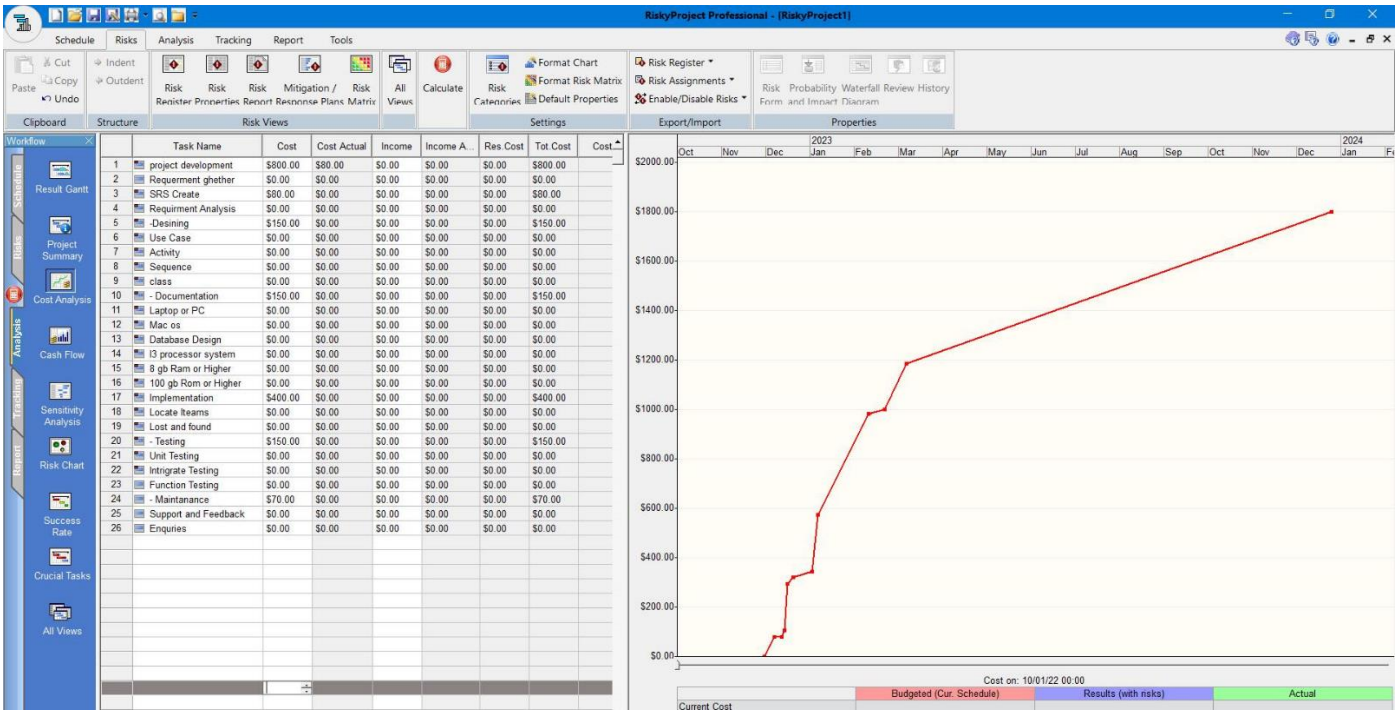


	Task Name	Planned Value - PV (BCWS)	Earned Value - EV (BCWP)	AC (ACWP)	SV	CV	EAC	BAC	VAC
1	Requirement Gathering	$0.00	$0.00	$0.00	$0.00	$0.00	$4,800.00	$0.00	($4,800.00)
2	**SRS Create**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$3,440.00**	**$0.00**	**($3,440.00)**
3	Requirement Analys	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
4	**Designing**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$19,920.00**	**$0.00**	**($19,920.00)**
5	Use case	$0.00	$0.00	$0.00	$0.00	$0.00	$1,760.00	$0.00	($1,760.00)
6	Activity	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
7	Sequence	$0.00	$0.00	$0.00	$0.00	$0.00	$3,600.00	$0.00	($3,600.00)
8	Class	$0.00	$0.00	$0.00	$0.00	$0.00	$1,360.00	$0.00	($1,360.00)
9	**Documentation**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$34,040.00**	**$0.00**	**($34,040.00)**
10	Laptop or PC	$0.00	$0.00	$0.00	$0.00	$0.00	$720.00	$0.00	($720.00)
11	macOS Sierra and a	$0.00	$0.00	$0.00	$0.00	$0.00	$2,080.00	$0.00	($2,080.00)
12	Database design	$0.00	$0.00	$0.00	$0.00	$0.00	$1,080.00	$0.00	($1,080.00)
13	I3 processor system	$0.00	$0.00	$0.00	$0.00	$0.00	$4,800.00	$0.00	($4,800.00)
14	8 GB RAM or higher	$0.00	$0.00	$0.00	$0.00	$0.00	$4,160.00	$0.00	($4,160.00)
15	100 GB ROM or higl	$0.00	$0.00	$0.00	$0.00	$0.00	$1,200.00	$0.00	($1,200.00)
16	**Implementation**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$7,360.00**	**$0.00**	**($7,360.00)**
17	Locate Items	$0.00	$0.00	$0.00	$0.00	$0.00	$2,040.00	$0.00	($2,040.00)
18	Lost and Found	$0.00	$0.00	$0.00	$0.00	$0.00	$520.00	$0.00	($520.00)
19	**Testing**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$26,986.67**	**$0.00**	**($26,986.67)**
20	Unit testing	$0.00	$0.00	$0.00	$0.00	$0.00	$360.00	$0.00	($360.00)
21	Integrate testing	$0.00	$0.00	$0.00	$0.00	$0.00	$2,040.00	$0.00	($2,040.00)
22	Function testion	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
23	**Maintainance**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$9,960.00**	**$0.00**	**($9,960.00)**
24	Support and Feedba	$0.00	$0.00	$0.00	$0.00	$0.00	$2,400.00	$0.00	($2,400.00)
25	Enquiries	$0.00	$0.00	$0.00	$0.00	$0.00	$1,560.00	$0.00	($1,560.00)

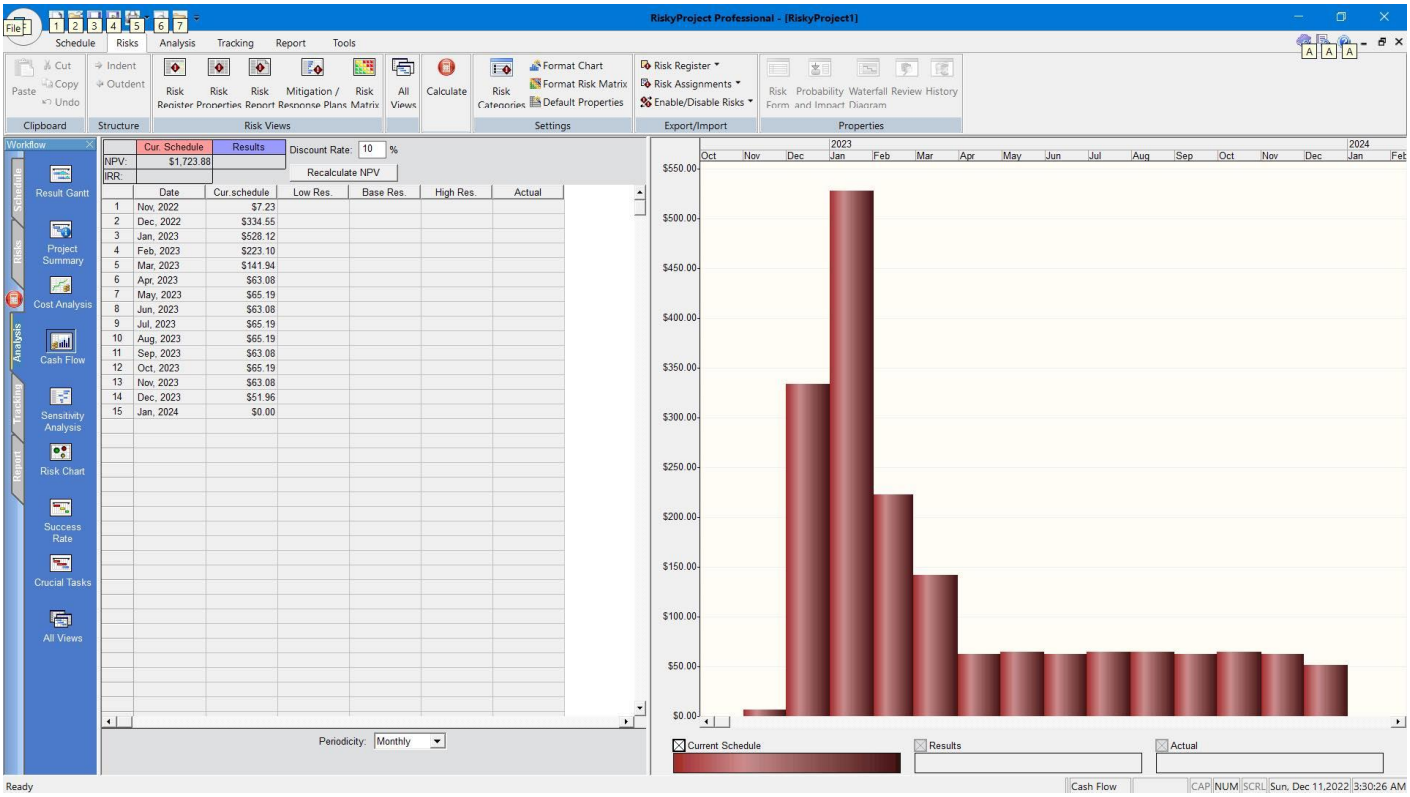
Resource Analysis:



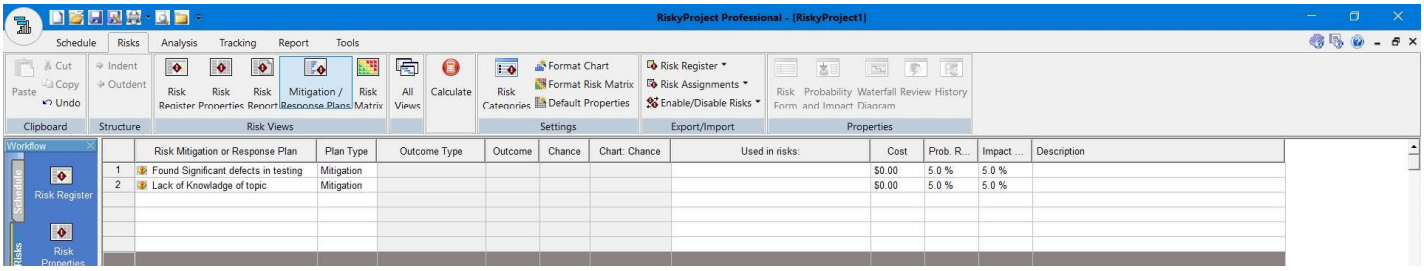
Risk Cost Analysis:



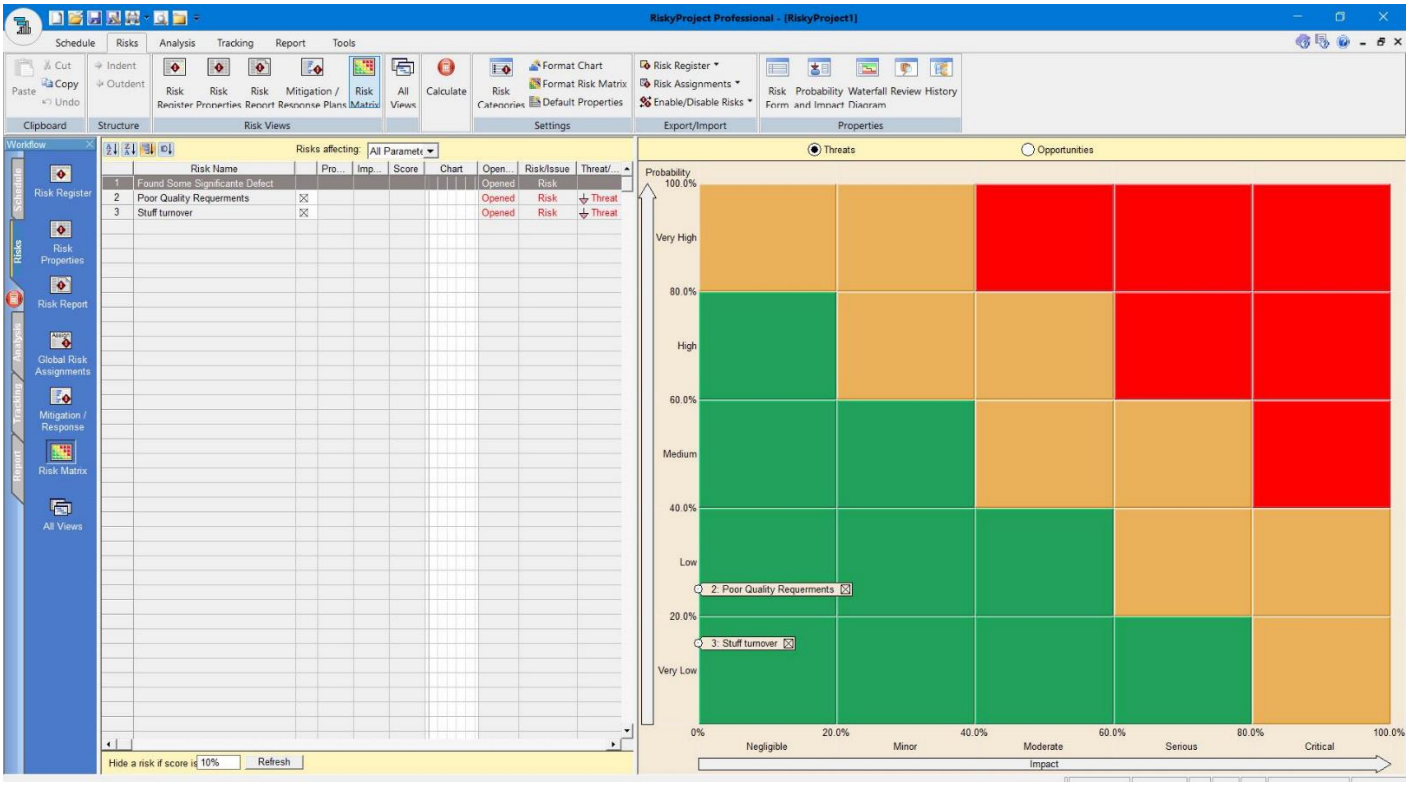
Risky Cash Flow:



Risk Mitigation:



Risk Matrix:


RiskyProject Professional - [RiskyProject1]
Schedule
Risks
Analysis
Tracking
Report
Tools
Risk Register
Risk Properties
Risk Report
Global Risk Assignments
Mitigation / Response
Risk Matrix
All Views
Risk Name
Found Some Significante Defect
Poor Quality Requerments
Stuff turnover
Threats
Opportunities
Probability
100.0%
Very High
80.0%
High
60.0%
Medium
40.0%
Low
20.0%
Very Low
0%
2. Poor Quality Requerments
3. Stuff turnover
Negligible
Minor
Moderate
Serious
Critical
Impact
Refresh