Project Risk Analysis Table For SmileScan White

Risk Number	Status	Risk Name	Description		Impact (1-5)	Ease of Detectability (1-5)	Risk Priority Number	Date Opened	Risk Owner	Date Closed
1	Closed	Ineffective Whitening Agent	The selected whitening agent may not produce the desired results.		5	4	60	9/14/23	Eshani	9/16/23
2	Closed	Sensor Malfunction	The integrated shade scanner may malfunction, leading to inaccurate readings.	3	4	4	48	9/15/23	Shreyas	9/17/23
3	Closed	Microcontroller Issues	The microcontroller may face issues, affecting the smart features of the device.	3	4	3	36	9/16/23	Jessi+Shreyas	9/20/23
4	Closed	User Interface Complexity	Users may find the interface too complex, leading to improper usage.	2	4	4	32	9/17/23	Shreyas + Eshani	9/18/23
5	Closed	Prototype Development Delays	Delays in obtaining materials or technical issues may push back the development timeline.	4	4	3	48	9/18/23	Jessi	9/20/23
6	Closed	Budget Overrun	Costs may exceed the anticipated project cost due to unforeseen expenses.	3	5	2	30	9/20/23	Laxmi	9/25/23
7	Closed	Supply Chain Disruptions	Issues in the supply chain may lead to delays in obtaining necessary components.	3	3	3	27	9/22/23	Amulya	9/25/23
8	Closed	Adverse User Reactions	Users may experience unexpected side effects from the whitening agent.	2	5	4	40	9/23/23	Eshani	9/25/23
9	Closed	Software Integration Issues	Challenges in integrating the device's software with existing dental databases.	3	4	3	36	9/24/23	Shreyas	9/30/23
10	Closed	Hardware Compatibility	Potential issues with the device's hardware compatibility with various computer systems.	2	4	3	24	9/25/23	Shreyas	9/30/23
11	Closed	Battery Life Concerns	The device's battery may not last as long as expected, requiring frequent recharging.	3	3	4	36	9/26/23	Jessi + Amulya	10/1/23
12	Closed	Device Overheating	The device may overheat during prolonged usage.	2	4	4	32	9/28/23	Keerthika	9/30/23

13	Closed	Inaccurate User Manuals	The user manuals provided may contain inaccuracies or may not be user-friendly.		3	3	18	9/29/23	Amulya + Laxmi	10/5/23
14	Closed	Delayed Software Updates	Delays in releasing software updates for the device.	3	3	2	18	9/30/23	Shreyas	10/10/23
15	Closed	Material Shortage	Shortage of materials required for the manufacturing of the device.	3	4	2	24	10/1/23	Eshani	10/06/23
16	Closed	Device Durability Concerns	Concerns regarding the durability and longevity of the device.	2	4	3	24	10/2/23	Jessi	10/5/23
17	Closed	Lack of User Feedback	Insufficient feedback from users during the testing phase.	3	3	3	27	10/3/23	Laxmi	10/10/23

The risks prioritized based on their Risk Priority Number (RPN)						
Risk Number	Risk Name	Likelihood	Impact	Detectability	RPN	
1	Ineffective Whitening Agent	3	5	4	60	
2	Sensor Malfunction	3	4	4	48	
3	Microcontroller Issues	3	4	3	36	
4	User Interface Complexity	2	4	4	32	
5	Prototype Development Delays	4	4	3	48	
6	Budget Overrun	3	5	2	30	
7	Supply Chain Disruptions	3	3	3	27	
8	Adverse User Reactions	2	5	4	40	
9	Software Integration Issues	3	4	3	36	
10	Hardware Compatibility	2	4	3	24	

11	Battery Life Concerns	3	3	4	36
12	Device Overheating	2	4	4	32
13	Inaccurate User Manuals	2	3	3	18
14	Delayed Software Updates	3	3	2	18
15	Material Shortage	3	4	2	24
16	Device Durability Concerns	2	4	3	24
17	Lack of User Feedback	3	3	3	27

Risk mitigation strategy for each risk

Risk Number	Risk Name	Risk Priority Number	Risk Mitigation Strategy
1	Ineffective Whitening Agent	60	Conduct thorough testing of various agents, gather user feedback.
2	Sensor Malfunction	48	Implement rigorous quality checks, provide user guidelines.
3	Microcontroller Issues	36	Ensure quality sourcing of microcontrollers, regular software updates.
4	User Interface Complexity	32	Involve users in the design phase, offer training sessions.
5	Prototype Development Delays	48	Maintain a buffer in the project timeline, regular progress checks.
6	Budget Overrun	30	Regular budget monitoring, set aside a contingency fund.
7	Supply Chain Disruptions	27	Diversify suppliers, maintain stock of critical components.
8	Adverse User Reactions	40	Conduct user trials, ensure clear communication of potential side effects.
9	Software Integration Issues	36	Engage IT specialists, ensure compatibility checks.
10	Hardware Compatibility	24	Standardize hardware requirements, provide clear specifications.
11	Battery Life Concerns	36	Optimize device energy consumption, user guidelines on charging.
12	Device Overheating	32	Optimize device design for heat dissipation, user guidelines.
13	13 Inaccurate User Manuals		Engage technical writers, gather user feedback on manuals.
14	Delayed Software Updates	18	Implement agile software development, regular update schedule.

15	Material Shortage	24	Engage multiple suppliers, monitor stock levels.
16	Device Durability Concerns	24	Use durable materials, offer warranty.
17	Lack of User Feedback	27	Engage users early, offer incentives for feedback.