Risk Assessment for Individual Project: Open-Source Stereo Video Camera System for VR Lifelogging

Risk event	Likelihood (1-5)	Impact (1-5)	Risk Exposure (1-25)	Mitigative Action	Alternative Action
Fitting electronics into a spectacle frame clip-on enclosure is too technically complex and difficult.	4	4	16	Conduct thorough prototyping and testing of the case design early in the project to identify and address integration issues.	Explore alternative enclosure designs or materials that are more manageable in terms of complexity.
Processing power and onboard memory of Raspberry Pi Pico might not be enough for the complexity of this project.	4	5	20	Optimize code and data storage to work efficiently within the constraints of the Raspberry Pi Pico boards.	Consider upgrading to more powerful microcontrollers if necessary.
Powering three Raspberry Pi Pico devices with their electronics from a single supply may lead to suboptimal or non-functional performance.	5	3	15	Calculate power consumption and explore energy-efficient solutions. Implement features such as power management and hot-swappable batteries to address power challenges.	Use separate power supplies for each Raspberry Pi Pico to ensure stable and independent power sources.
Developing VR-specific lifelogging software with features like immersive user interface elements, scene/object detection, and metadata auto-tagging may introduce technical complexities, potentially causing project delays.	5	2	10	Simplifying the software scope, such as omitting scene detection and reducing metadata features, can help mitigate technical complexities and minimize project delays.	Utilize pre-existing VR software or libraries to simplify the software development process while still achieving project goals.
Implementing stereo content within a VR game engine may prove technically challenging and time-consuming.	5	5	25	Plan for potential difficulties in stereo implementation and be prepared to use existing applications for viewing	Explore VR game engine plugins or assets specifically designed for SBS video playback,

				SBS content as an alternative.	simplifying the integration and reducing technical complexities.