GROUP: SPACE X

PROJECT: smart
eyeglasses
implemented with
AI

<u>CLIENT BACKGROUND</u>: The client is enthusiastic about the potential of smart glasses to revolutionize daily life and work. They see smart glasses as a tool that can enhance productivity, convenience, and connectivity. The client believes smart glasses can seamlessly integrate the physical and digital worlds, providing hands-free access to information and communication. They are eager to explore and embrace this innovative technology to unlock its full potential.

EXISTING TECHNOLOGY / TOOL USED BY THE CLIENT: TOOLS SUCH AS TENSORFLOW WORK AS THEIR BRAINPOWER FOR TASKS LIKE OBJECT RECOGNITION AND LANGUAGE UNDERSTANDING. IT SERVES AS THEIR EYES, ENABLING IMAGE AND VIDEO INTERPRETATION. SENSORS, INTEGRATED WITH THE HELP OF MANUFACTURERS' TOOLS, PROVIDE ESSENTIAL DATA FOR THE GLASSES TO UNDERSTAND THEIR SURROUNDINGS. CLOUD PLATFORMS LIKE AWS AND AZURE SUPPORT HEAVY COMPUTATIONAL TASKS, AND MANUFACTURERS OFFER DEVELOPER TOOLKITS FOR STREAMLINED APP CREATION. PROGRAMMING LANGUAGES SUCH AS JAVA FACILITATE COMMUNICATION WITH SMART GLASSES.

Problems with existing technology / tool used by the client:

- 1) Limited battery life: Smart glasses require frequent recharging and have a limited usage time, posing a challenge for users.
- 2) Compatibility issues: Smart glasses face difficulties in connecting and functioning seamlessly with other devices and operating systems.
- 3) Privacy concerns: The presence of built-in cameras in smart glasses raises worries about unauthorized recording and invasion of privacy.
- 4) Limited functionality: Smart glasses have less functionality compared to smartphones and other devices, limiting their versatility and usefulness.
- 5) Lack of fashionable options: Users struggle to find stylish smart glasses that align with their personal style preferences.

<u>Proposed idea / solutions to overcome the problems</u>: 1) <u>Limited battery life Solution</u>: Battery optimization, quick charging, and consideration of removable batteries.

- 2) Compatibility issues solution: Universal standards, regular firmware updates, and an open API for third-party developers.
- 3) Privacy concerns solution: Physical shutter, robust privacy settings, and adherence to privacy regulations.
- 4) Limited functionality solution: Continuous feature expansion, integration with popular ecosystems, and incentives for developers.
- 5) Al Assistance solution: Addition of Al assistant as a guide for the user to use smart glasses.

Key Advantages of Smart Glasses: Smart glasses provide a hands-free experience, allowing users to access information and interact with digital content without holding a device. They enhance interactions with real-time data and facilitate improved communication through video communication features, enabling users to stay connected while keeping their hands free. Additionally, smart glasses have the capability to provide instant access to real-time information, including directions, notifications, and updates, eliminating the need for a separate device.