BlinkID

Project Plan

Version 3.0

Document Preparation

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Revision History

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| **Date** | **Version** | **Description** | **Author** |
| 04/10/24 | 1.0 | The first draft | Akash Rao Sudati,  Venkata Sai Ramya Padmasri Boggaram |
| 04/11/24 | 2.0 | Some Changes in every module | Dubba Mounika Reddy |
| 04/22/24 | 3.0 | Made modifications for font, Table of contents, Users. | Himaadithi Lethakula |

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Project Plan Documentation

# Introduction

## Purpose of the Document

The purpose of the project plan document is to offer a comprehensive roadmap for the development and deployment of the BlinkID mobile application, encompassing its business objectives, product goals, and quality benchmarks. It serves as a structured guide to align stakeholders, define project scope, and outline key milestones, ensuring clarity and cohesion throughout the project lifecycle.

## Scope of the Document

The project plan document for the BlinkID mobile application outlines its primary aims and objectives, providing a comprehensive overview of the project's scope, goals, and constraints. It includes details on project positioning, stakeholder analysis, and user requirements to ensure alignment with project objectives. Moreover, the document highlights high-level product features, constraints, quality ranges, and priority levels, offering a clear roadmap for the project team. By serving as a communication tool, it fosters agreement among all parties involved and promotes cooperation toward achieving common objectives. Ultimately, the document acts as a vital tool for guiding the project team, ensuring clarity on deliverables, and facilitating effective project management throughout the development process.

## References

# Zhang, Y., Zhang, W., & Xiong, N. N. (2018). Smart Campus with Facial Recognition and Tracking. In Proceedings of the International Conference on Smart Computing and Communication (pp. 292-302). Springer, Cham.

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# Project\_smart\_campus\_PPD\_version\_2( <https://drive.google.com/file/d/1k0n1DCK70Ez_OurQhA22LG9MwKlwD7so/view?usp=drive_link>)

# Project\_smart\_campus\_Project\_vision\_Document\_version\_2(<https://drive.google.com/file/d/1sNEibsJLEY_eJ1BWT9CaKe5C81u5NqAZ/view?usp=drive_link>)

# Project\_smart\_campus\_SDD\_version\_2(<https://drive.google.com/file/d/1VtA0Jfs0HiZzkVKC_BNsphXsSO37Zltw/view?usp=drive_link>)

# Project\_smart\_campus\_Software\_Test\_Document\_(STD)\_version\_2(<https://drive.google.com/file/d/1PrSeEJN5LjtrF04M8tCuSCU4CEn7TSg4/view?usp=drive_link>)

# Project\_smart\_campus\_SRS\_version\_2(https://drive.google.com/file/d/1rkHd3ZsuzLRmns8lIaKHoTFJ3oYld3\_4/view?usp=drive\_link)

## Definitions, Acronyms, and Abbreviations

|  |  |  |
| --- | --- | --- |
| **Term** | **Abbreviation / Acronym** | **Definition** |
| BlinkID | - | The proposed facial recognition system for Smart Campus security. |
| Facial Recognition Technology | FRT | Technology capable of verifying or identifying a person from a digital image or video frame. |
| Compliance | - | Adherence to relevant laws, regulations, and standards governing data privacy, security, and accessibility within the BlinkID project context. |
| Access Control | - | A system that manages access to resources by granting or denying requests based on user credentials. |
| Examination Proctoring | - | The use of technology to monitor students during examinations. |

# Project Goals

## Business Goals

The primary objective of the BlinkID initiative is to establish a prominent presence in the market by leveraging cutting-edge facial recognition technology to enhance security measures. By positioning BlinkID as a leading solution provider, we aim to govern access to campus facilities and become the go-to choice for educational institutions seeking robust security solutions. Prioritizing user-friendly interfaces and mobile compatibility ensures widespread adoption, solidifying BlinkID's market position. Additionally, by focusing on functionality enhancement and seamless integration with existing campus systems, we aim to offer unmatched value to our customers. Proactive measures such as real-time notifications and continuous support demonstrate our commitment to maintaining market relevance and ensuring customer satisfaction. Through comprehensive user education and training initiatives, we seek to empower our users with the knowledge and skills to effectively utilize BlinkID, further strengthening our position as a trusted leader in campus security solutions.

## Product Goals

BlinkID aims to achieve multiple objectives to enhance campus security and streamline access control processes. By leveraging advanced facial recognition technology, BlinkID facilitates seamless authentication, communication, and community building, fostering a safe and trusting environment within the campus community. It guarantees the legitimacy of permitted documents for identification and access verification, ensuring robust security measures. BlinkID actively involves administrators and users in establishing a secure access network, thereby reducing unwanted access, and enhancing overall security. Through real-time access and activity tracking, BlinkID provides enhanced security measures, allowing for effective monitoring and control. Ultimately, BlinkID aims to assist smart campus management in improving security, creating a safe atmosphere, offering a seamless user experience, ensuring security and privacy, and providing valuable assistance and resources. By meeting these objectives, BlinkID becomes an indispensable tool for smart campus management to effectively handle access control and enhance security measures.

## Quality Goals

# BlinkID's is committed to achieving excellence across various product quality attributes, including reliability, safety, effectiveness, accessibility, intuitiveness, hardware compatibility, and scalability. By prioritizing these standards, BlinkID ensures a seamless user experience, positioning itself as an indispensable tool for smart campus management. Meeting these quality benchmarks enhances security measures and optimizes access control processes, leading to improved efficiency and safety within campus environments. This comprehensive approach aligns with BlinkID's overarching goal of providing a flawless user experience and facilitating streamlined operations for enhanced security and management efficiency.

# Project Stakeholders and Stakes

## Summary of Key Stakeholder or User Needs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Problem Description** | **Reasons for Problem** | **Current Solution** | **Solutions** | **Ranking** |
| Lack of Security | Inadequate authentication methods leading to security breaches. | Traditional ID cards, PIN codes, or passwords. | Implement advanced biometric authentication (facial recognition) for enhanced security. | High |
| Inefficient Access Control | Manual verification processes causing delays and inefficiencies | Security guards or receptionists manually verify IDs. | Implement automated access control systems with facial recognition technology. | High |
| Limited Personalization | Generic experiences fail to meet individual needs and preferences. | One-size-fits-all approach to services and recommendations. | Develop a personalized recommendation engine based on facial recognition data. | Medium |
| Compliance Concerns | Current methods may not align with data protection regulations. | Ad hoc data handling processes without robust compliance measures. | Ensure BlinkID complies with relevant data protection regulations and privacy guidelines | High |

|  |  |  |  |
| --- | --- | --- | --- |
| **Key Problems** | **Stakeholders/Users** | **Reasons** | **Solutions** |
| Inefficient manual processes | Campus Security | Manual verification processes are time-consuming and prone to errors. | Implement automated access control systems with facial recognition technology to streamline processes and improve efficiency. |
| Lack of personalized experiences | Students | Generic experiences do not meet individual needs and preferences. | Develop a personalized user interface for students based on facial recognition data to enhance user experience. |
| Compliance concerns | IT Support Team | Current methods may not align with data protection regulations. | Ensure BlinkID complies with relevant data protection regulations and privacy guidelines by implementing robust compliance measures. |
| Limited access control customization | Facility Managers | Limited options for customization to meet specific facility management needs. | Provide customization options for access control measures based on facility requirements to improve effectiveness. |
| Security and privacy concerns | General Public | Concerns about the security and privacy of personal information. | Implement secure access control measures and privacy policies to address security and privacy concerns of the general public. |
| Difficulty in system integration | Developers | Limited resources and challenges in integrating BlinkID with existing systems. | Provide technical support and resources for developers to ensure smooth integration of BlinkID with existing systems. |
| Limited user engagement | Media Outlets | Limited engagement with access control initiatives. | Engage with media outlets to promote and support the implementation of BlinkID access control measures to increase user engagement. |
| Lack of trust and transparency | Investors/Sponsors | Concerns about the legitimacy and effectiveness of access control measures. | Provide transparency reports and updates on the impact and effectiveness of BlinkID access control measures to build trust and confidence among investors and sponsors. |
| Difficulty in finding support resources | Student Representatives | Difficulty in finding support and resources for improving access control measures. | Engage with student representatives to gather feedback and suggestions for improving BlinkID access control measures and provide them with the necessary support and resources. |
| Lack of collaboration and engagement | Community Leaders | Lack of collaboration and engagement with access control initiatives. | Provide resources and tools for community leaders to promote and support the implementation of BlinkID access control measures to increase collaboration and engagement. |
| Limited technical support | Individual Fundraisers | Limited technical support for implementing access control measures. | Provide user-friendly tools and resources for individual fundraisers to implement BlinkID access control measures effectively. |
| Concerns about data security | Students | Concerns about the security of students and organization data. | Implement secure registration of students. |

# Project Budget

The budget for implementing BlinkID encompasses various components essential for its development, deployment, and maintenance. This budgeting approach ensures that sufficient resources are allocated to each aspect of the project to achieve its objectives effectively. The following table outlines the estimated costs for each component based on the provided data:

| **Component** | **Monthly Cost** | **Description** |
| --- | --- | --- |
| Developers | $22,400 | 4 developers spending 40 hours per week at $39 per hour |
| Testers | $4,000 | 2 testers spending 20 hours per week at $25 per hour |
| Managers | $3,600 | Managers spending 40 hours per week at $45 per hour |
| Software Costs | $500 - $2,000 | Variable cost depending on traffic, ranging from $500 to $2,000 per month |
| Miscellaneous Costs | $500 | Miscellaneous expenses such as utilities, office supplies, etc. |
| Infrastructure Costs | TBD | Costs associated with hardware, servers, networking equipment, etc. |
| Training and Education | TBD | Expenses for training sessions, workshops, and educational materials |
| Integration Costs | TBD | Expenses related to integrating BlinkID with existing systems and databases |
| Maintenance and Support | TBD | Ongoing maintenance, updates, and technical support |
| Contingency | TBD | Reserved funds for unforeseen expenses, scope changes, or delays |

# Project Milestones and Schedule

Project Start Date: 01/31/2024

Project End Date: 04/23/2024

|  |  |  |
| --- | --- | --- |
| **Project Milestone** | **Date** | **Deliverable** |
| Problem Analysis, Vision Creation, Project Planning | 02/09/2024  02/16/2024 | Product Vision Document  Project Plan |
| Requirements Analysis | 02/23/2024 | Software Requirements Specification (SRS) |
| Product Design | 03/22/2024 | Software Design Document (SDD) |
| Product Implementation | 03/20/2024 | Software Code |
| Product Test | 03/29/2024 | Software Test Document (STD) |
| Final Product Deliverable | 04/12/2024 | All Documentation and Code |
| Product Launch | 04/23/2024 | Project Presentation |

# Project Communications

# This is the organized way our group communicate with each other:

Slack for Team Communication: To improve efficiency and maintain order, use Slack channels for a variety of project-related conversations, such as announcements, task-specific updates, and general updates.

Trello Integration: When you integrate Trello with Slack, team members can remain updated on task progress and updates by getting notifications in Slack whenever there are updates to your Trello boards.

GitHub connection: Team members may effectively collaborate on GitHub and stay informed about code changes by using Slack's GitHub connection to receive notifications about pull requests, repository activity, and code changes.

Google Docs Integration: To help with documentation collaboration, share links to Google Docs in Slack channels. This makes it simple for team members to view and modify documents directly from Slack.

# Project Members and Roles

|  |  |  |
| --- | --- | --- |
| **Project Role** | **Name** | **Responsibilities** |
| Project Manager | Varun Vanaparthi | Gathering requirements, managing budget and resources, managing risks, managing stakeholders, ensuring quality. |
| Project Technical Manager | Venkata Sai Ramya Padmasri Boggaram | Managing technical resources, ensuring technical quality, creating technical documentation. |
| Project Quality Assurance and Configuration Manager | Mounika Reddy Dubba | Developing and implementing quality assurance processes, conducting quality audits, managing quality control activities. |
| Project Requirements Manager | Himaadithi Lethakula | Gathering, analyzing, documenting, managing changes to, validating, and ensuring traceability of project requirements. |
| Project Design Manager | Vyshnavi Balabhadruni | Ensuring accessibility, developing a content strategy, managing the design system. |
| Project Configuration Manager | Akash Rao Sudati | Ensuring compliance with quality standards and regulations, and continuously improving quality processes and outcomes. |
| Software Developer | Sai Charan Kammampally | Developing the application, testing and maintaining the application, ensuring security. |
| Software Developer | Sriharsha Lanka | Developing the application, testing and maintaining the application, ensuring security. |
| Software Developer | Chethan Reddy Mallu | Developing the application, testing and maintaining the application, ensuring security. |
| Software Developer | Ritheesh Reddy Gavva | Developing the application, testing and maintaining the application, ensuring security. |
| Test Engineer | Shiva Kumar Goud Shankaragari | Reporting on test results, ensuring quality assurance. |
| Test Engineer | Dheeraj Chigurupati | Reporting on test results, ensuring quality assurance. |

# Project Work Breakdown Structure (WBS)

|  |  |  |  |
| --- | --- | --- | --- |
| **Work Package Number** | **Work Package Name** | **Responsible Team Member** | **Definition** |
| WP-1 | Project Management | Varun Vanaparthi,  Venkata Sai Ramya Padmasri Boggaram | It includes Project Execution, Project Monitoring and Control and Project closure. |
| WP-2 | Requirement Gathering | Himaadithi Lethakula | It includes user Needs Analysis, Business Requirements, Technical requirements, Functional requirements. |
| WP-3 | Design | Vyshnavi Balabhadruni | It includes UI design / Database Design. |
| WP-4 | Development | Sai Charan Kammampally,  Sriharsha Lanka,  Chethan Reddy Mallu,  Ritheesh Reddy Gavva | It includes Front-end and Back-end development. |
| WP-5 | Testing | Shiva Kumar Goud Shankaragari,  Dheeraj Chigurupati | It includes different testing like Unit testing, User Acceptance Testing, etc. |
| WP-6 | Deployment | Akash Rao Sudati,  Mounika Reddy Dubba | It includes Product deployment. |

# Project Deliverables

|  |  |
| --- | --- |
| **Deliverable Number** | **Deliverable Name** |
| D-1 | Project Vision |
| D-2 | Project Plan |
| D-3 | Software Requirement Specification |
| D-4 | Software Design Document |
| D-5 | Software Test Document |
| D-6 | Software Source Code |
| D-7 | Product Launch |

# Project Risks

|  |  |  |
| --- | --- | --- |
| **Risk Number** | **Risk** | **Risk Reduction Approach** |
| R-1 | Security Breaches | There's a risk of security breaches compromising user data. We'll mitigate by implementing robust encryption and continuous security monitoring. |
| R-2 | Fraudulent Activities | Potential for fraudulent access or misuse of BlinkID. Mitigation involves vigilant monitoring and implementing fraud detection measures. |
| R-3 | Lack Of User Trust | Risk of users losing trust due to unclear data handling practices. Clear and transparent communication about security measures will mitigate this risk. |
| R-4 | Transaction errors | Possibility of transaction errors leading to user dissatisfaction. Timely identification and resolution of errors through effective communication are key to mitigation. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Priority** | **Severity** | **Probability** | **Risk Level** |
| R-1 | High (3) | High (3) | 9 |
| R-2 | Medium (2) | High (3) | 6 |
| R-4 | Low (1) | Medium (2) | 2 |
| R-3 | Low (1) | Low (1) | 1 |

# Appendix A – Definitions, Acronyms, and Abbreviations

|  |  |  |
| --- | --- | --- |
| **Term** | **Abbreviation / Acronym** | **Definition** |
| CRM | Customer Relationship Management | It refers to a set of strategies, practices, and technologies that businesses use to manage and analyze customer interactions and data throughout the customer lifecycle. |
| UI | User Interface | It refers to the visual and interactive components of a software application or digital product that users interact with the app. |
| APK | Android Application Package | It is the package file format used by the Android operating system for distribution and installation of mobile apps. |
| API | Application Programming Interface | It is a set of protocols, tools, and standards that allow different software applications to communicate with each other. |