

FOCUS FLOW

AI-powered Productivity & Distraction Control System

Team: Anti Virus

Hackathon: TechSprint AOT (GDG On-Campus)

(Built with Google Gemini & Firebase)

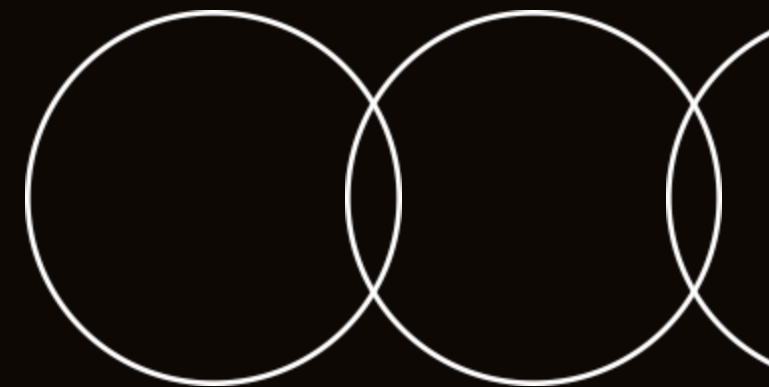


PROBLEMS

Despite access to digital tools, students suffer from:

- Cognitive overload due to constant notifications
- Lack of awareness of their own focus patterns
- No data-driven way to improve productivity

Current productivity tools are static and generic — they do not adapt to individual behavior.



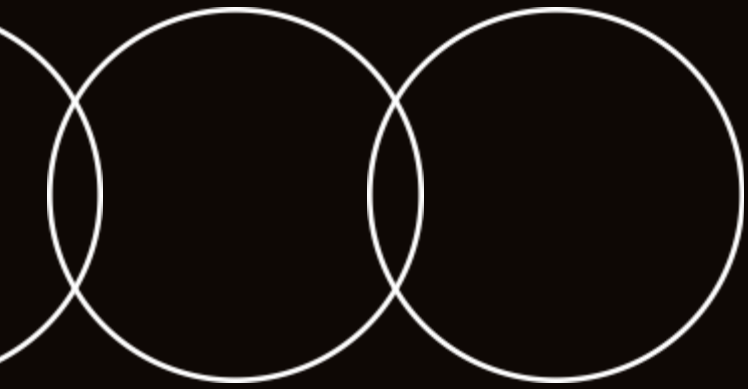
SOLUTIONS



Focus Flow is an intelligent focus optimization system that:

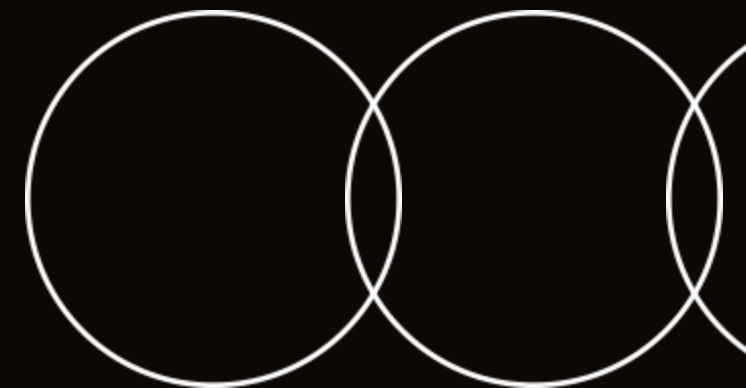
- Continuously analyzes user behavior
- Learns individual distraction patterns using AI
- Dynamically adapts study schedules and break cycles

It creates a closed feedback loop for continuous productivity improvement.



CORE CAPABILITIES

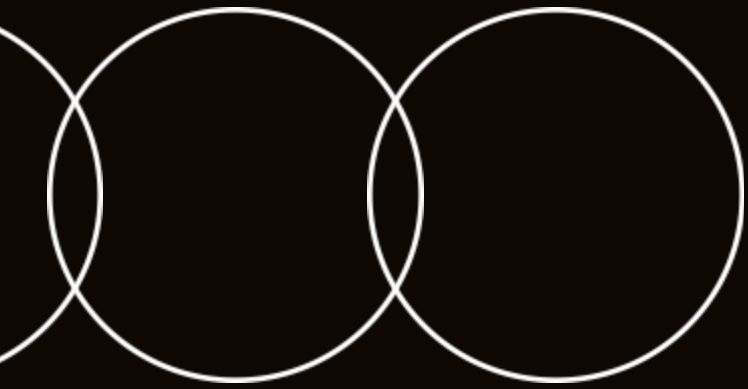
- ❖ Behavioral focus tracking
- ❖ Real-time distraction detection
- ❖ AI-driven schedule optimization
- ❖ Productivity trend analytics
- ❖ Personalized intervention suggestions



SYSTEM WORKFLOW

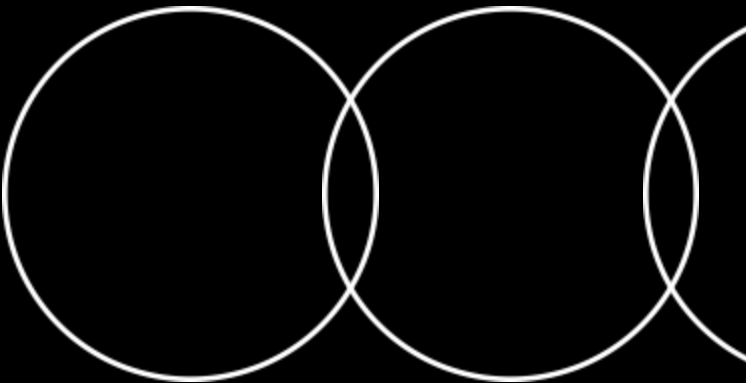
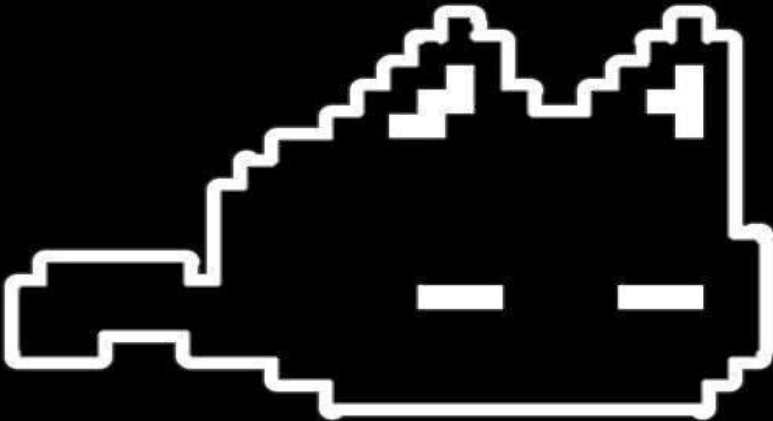


- ❑ Capture user interaction and session metadata
- ❑ Store focus signals in Firebase
- ❑ Gemini analyzes patterns and generates insights
- ❑ Recommendations are updated dynamically
- ❑ User behavior improves over time

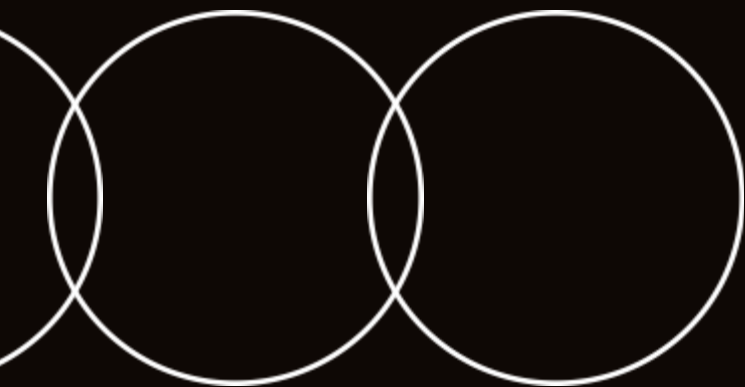
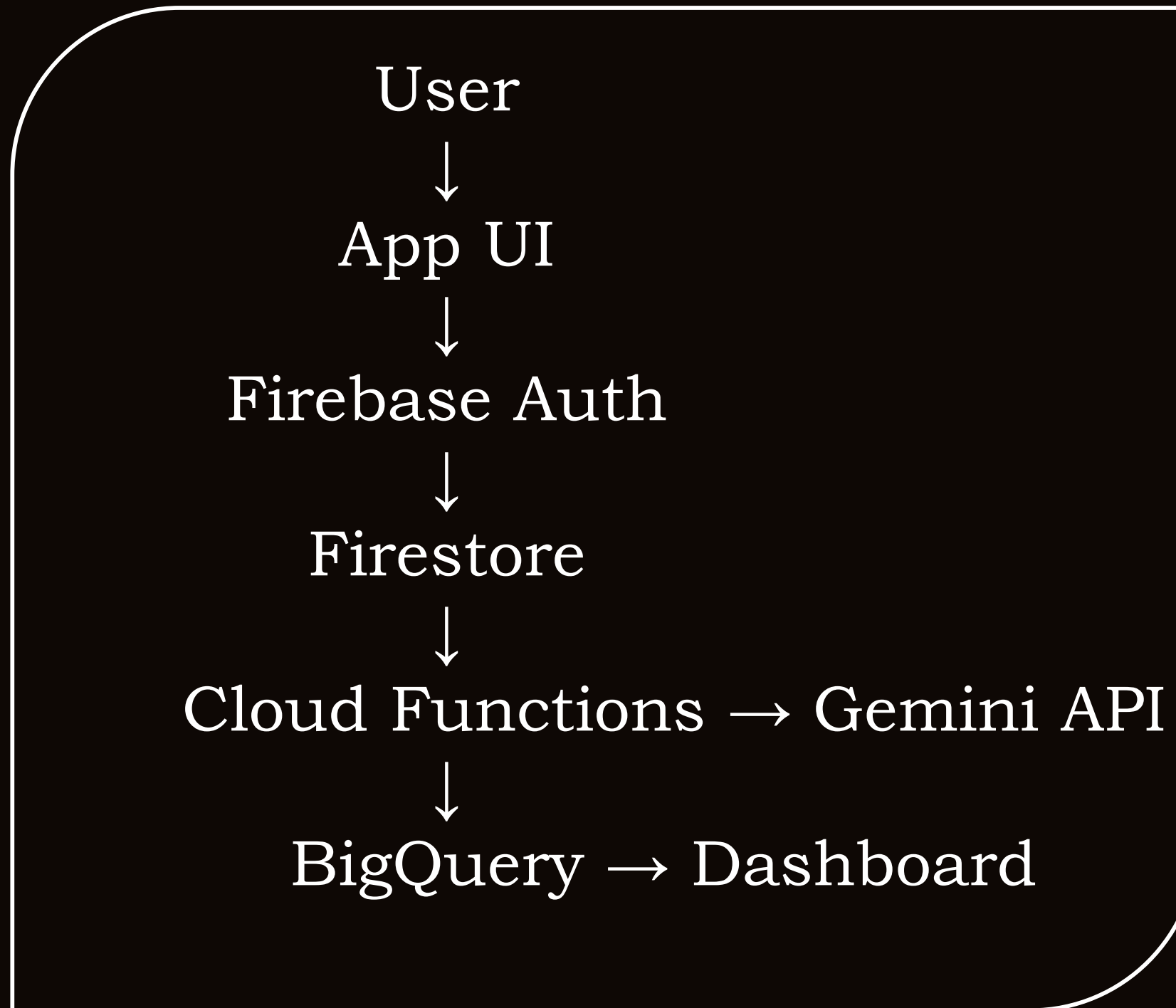


TECHNOLOGY STACK

Layer	Technology
Client	Web / Mobile Interface
Data Layer	Firebase Firestore
AI Layer	Google Gemini API
Analytics	BigQuery
Orchestration	Cloud Functions
Hosting	Firebase Hosting

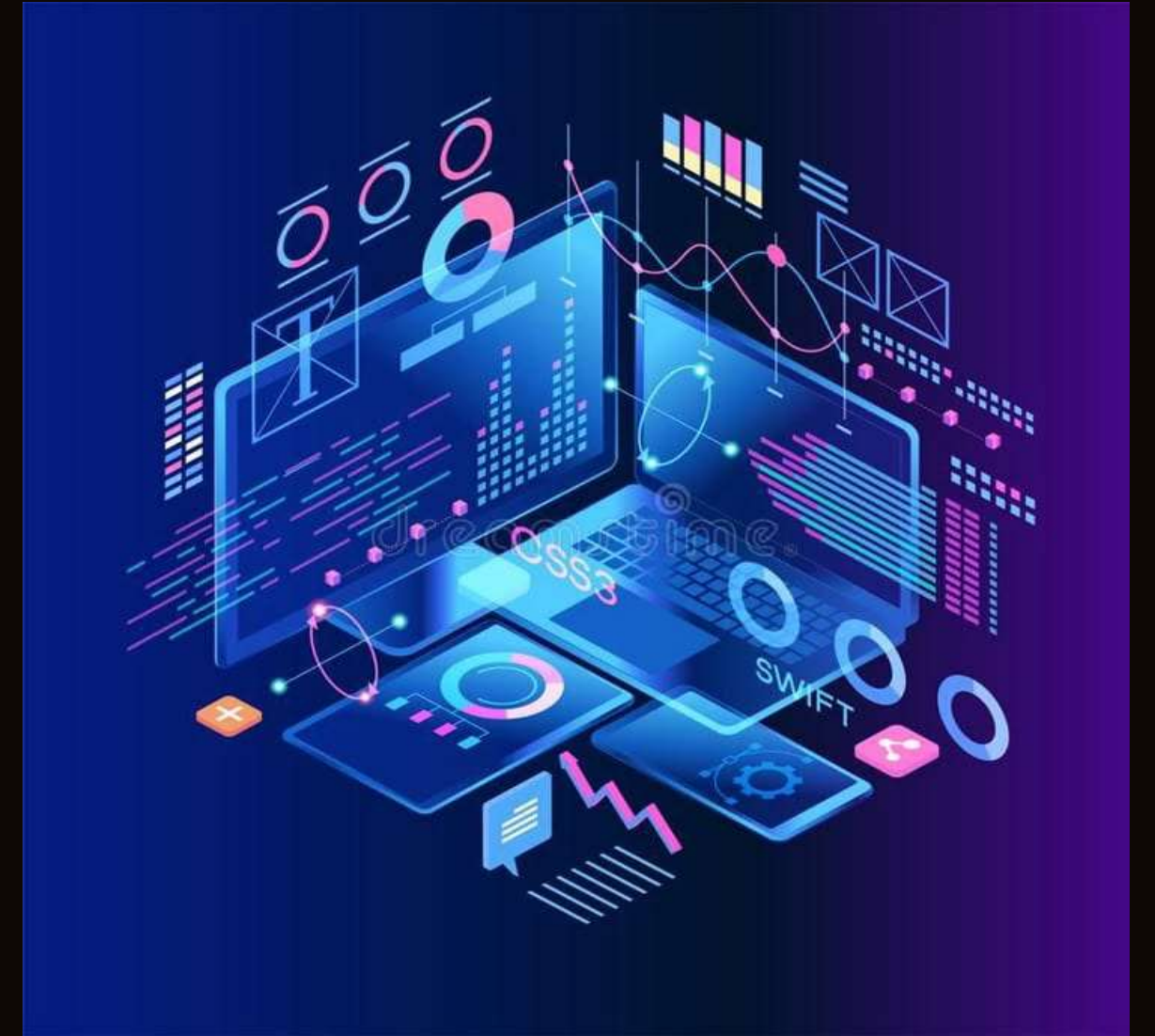


SYSTEM ARCHITECTURE

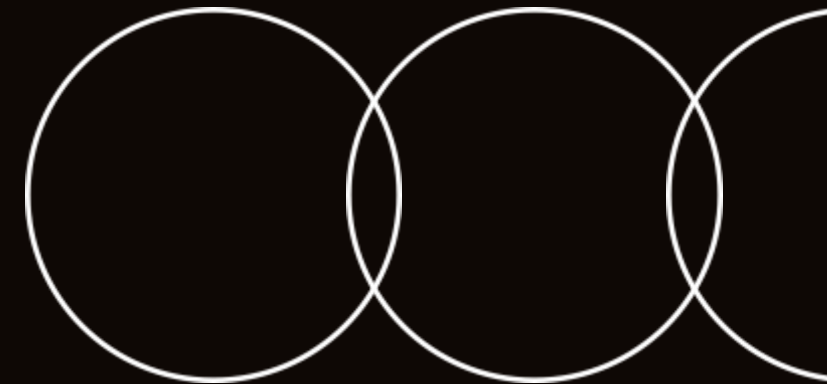


USE CASE SCENARIO & IMPACT

A student preparing for exams experiences frequent interruptions.
Focus Flow identifies peak focus windows and recommends optimized study sessions with adaptive break timing.

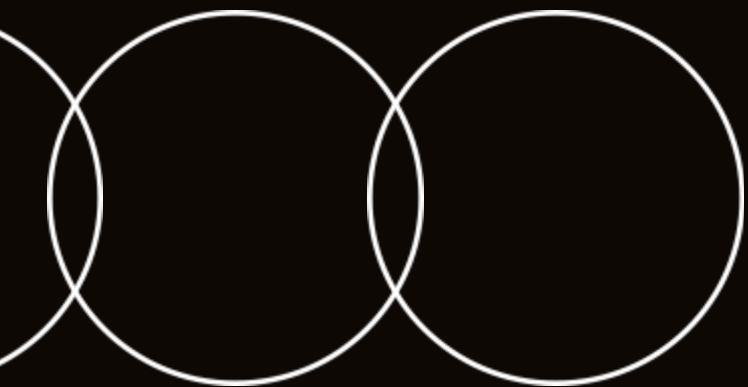


- ⊠ Increased deep work time
- ⊠ Improved academic performance
- ⊠ Reduced burnout and cognitive fatigue
- ⊠ Data-informed learning habits



FUTURE ENHANCEMENTS

- ☐ Biometric focus detection via wearables
- ☐ Emotion-aware focus adaptation
- ☐ Classroom-level analytics for institutions
- ☐ Integration with Learning Management Systems



CONCLUSION

Focus Flow transforms student productivity by combining AI-driven insights, real-time distraction detection, and adaptive focus planning.

- Converts scattered study into deep, meaningful focus
- Leverages behavioral analytics for personalized learning
- Provides data-driven recommendations for continuous improvement
- Scalable to classrooms, campuses, or remote learning environments

Key Message:

Focus Flow is not just a productivity tool — it's an AI-powered companion that evolves with the user to maximize focus, efficiency, and well-being.

