

Project Overview: Medina Dates and Palm Trees Dataset

Virtual Date Museum Project - MedinaDate Hackathon

1 TEAM OVERVIEW

At AgrAldea, we are a dynamic and innovative team dedicated to solving agriculture's most pressing challenges through AI-powered solutions. Our current focus is on transforming the way people engage with Medina's rich heritage of dates and palm trees. Instead of relying on traditional forms of information sharing, we are creating a virtual reality world that immerses users in the beauty and significance of these natural wonders. Through this experience, users can explore Medina's historical, cultural, and agricultural legacy in a deeply engaging, interactive environment. Our mission is to merge cutting-edge technology with agriculture, offering unique experiences that connect people to the rich history of Medina in new and exciting ways.

2 TEAM MEMBERS

- **Youssef ElNahas – Project Manager:**

A highly motivated AI student at the University of Prince Mugrin, known for his leadership abilities and creative problem-solving skills. With a strong foundation in artificial intelligence, Youssef excels in managing projects that integrate innovative technology with practical applications. His approach combines strategic thinking with a passion for AI, driving AgrAldea's vision and ensuring the smooth execution of its goals. Youssef plays a pivotal role in aligning the team's efforts with the broader mission of transforming agricultural heritage through cutting-edge solutions.

- **Mohammed Sattar – Primary Researcher:**

An AI enthusiast and a dedicated researcher at the University of Prince Mugrin. He brings a wealth of technical knowledge and critical thinking to AgrAldea's projects, particularly in the realm of artificial intelligence tools and methodologies. Known for his adaptability and ability to navigate complex problems, Mohammed's research contributions are invaluable in laying the foundation for the team's AI-driven solutions. His work reflects a deep curiosity about emerging technologies, and his adaptability ensures that AgrAldea remains at the forefront of innovation.

- **Abubakar Waziri – Primary AI Developer:**

An AI student at the University of Prince Mugrin, specializing in data handling, analysis, and machine learning. His expertise lies in applying algorithms to develop predictive models that enhance decision-making in agricultural contexts. Proficient in Python and experienced in processing large datasets, Abubakar plays a critical role in the technical development of AgrAldea's AI solutions. His ability to turn complex data into actionable insights makes him an essential contributor to the project's innovation and success.

- **Hamza AlKaf – Primary Data Analyst:**

A data analysis expert and AI student at the University of Prince Mugrin, brings a meticulous approach to data cleaning, preparation, and visualization. His expertise ensures that AgrAldea's datasets are accurate, well-organized, and ready for further analysis. Hamza's adaptability and quick learning skills make him proficient in various data technologies, allowing him to create clear, insightful representations of complex agricultural data. His contributions help drive the analytical precision that underpins the team's AI initiatives.

- **Ahmad AlSulaimani – Documentation Lead:**

An AI student at the University of Prince Mughrin, excels in organizational management and documentation. His strong attention to detail and proficiency in various technological tools allow him to maintain accuracy and efficiency in all project workflows. Ahmad ensures that AgrAldea's processes are well-documented, facilitating seamless collaboration and project tracking. His role as Documentation Lead ensures that the team's work is clearly communicated and systematically organized, contributing to the overall quality and coherence of the project.

3 CONTRIBUTIONS

1. Primary Research:

- ElNahas (25%), AlKaf (15%), Sattar (25%), Waziri (20%), AlSulaimani (15%)

2. Secondary Research:

- ElNahas (20%), AlKaf (20%), Sattar (20%), Waziri (20%), AlSulaimani (20%)

3. Dates Dataset:

- ElNahas (12.5%), AlKaf (12.5%), Sattar (12.5%), Waziri (37.5%), AlSulaimani (25%)

4. Trees Dataset:

- ElNahas (23%), AlKaf (7%), Sattar (48%), AlSulaimani (22%)

5. Labeling:

- ElNahas (20%), AlKaf (80%)

6. Documentation:

- ElNahas (65%), AlSulaimani (35%)

7. Video Production:

- Sattar (20%), Waziri (30%), AlSulaimani (15%), ElNahas (20%), AlKaf (15%)

8. Summary of Contributions:

- AlKaf (100%)

9. Team Information:

- ElNahas (70%), Sattar (20%), AlSulaimani (10%)

10. Licensing:

- Sattar (100%)

4 CONCLUSION

This dynamic, multidisciplinary team operates with a seamless synergy, uniting diverse skills and perspectives to drive the success of the Virtual Date Museum Project. From cutting-edge research and AI development to precise documentation and data analysis, each member contributes their unique expertise. Together, they are dedicated to transforming how people experience Medina's rich agricultural heritage by crafting innovative AI solutions and creating immersive virtual reality environments. Their collective vision is to meticulously design a groundbreaking experience that not only showcases the beauty and cultural significance of Medina's dates and trees but also honors its deep historical roots in an engaging and transformative way.