

Graduation Projects Specification Form – Academic Year 2024/2025

1	Project Title in Arabic نظام ذكي لتطوير السياحة
2	Project Title in English Smart Tourism Development System
3	Project Description (Problem, Proposed Solution) <p>Problem Statement: Problem: The tourism industry in Egypt faces challenges related to visitor satisfaction, as common issues around services, infrastructure, and tourist experiences are often unidentified or unresolved. Traditional feedback collection methods are limited and lack actionable insights, hindering effective improvements in the tourism sector.</p> <p>Proposed Solution: The Smart Tourism Development System leverages data analytics and machine learning to gather, analyze, and visualize feedback from platforms like TripAdvisor and others. By identifying key pain points, sentiment trends, and improvement opportunities, the system provides actionable insights through dashboards and reports.</p> <p>Key features include:</p> <ol style="list-style-type: none"> Automated Data Collection: Continuous scraping of tourist feedback for up-to-date insights. Sentiment Analysis: Categorizes feedback to show levels of satisfaction. Pain Point and Highlight Identification: Identifies frequent issues and positive aspects. Development Plan Suggestions: Generates recommendations to prioritize high-impact areas for improvement. Role-Based Access for Stakeholders: Custom dashboards for government bodies, tourism operators,

	<p>6. Exportable Reports: Easy report downloads for sharing insights and plans.</p> <p>7. Competitor Comparison: Compares feedback with other destinations to highlight improvement areas.</p> <p>8. Predictive Analytics: Forecasts potential issues based on past data trends.</p> <p>9. Prioritized Development Plans: Creates efficient, prioritized plans based on real tourist feedback to drive targeted improvements.</p>
4	<p>Target Beneficiary Group</p> <ul style="list-style-type: none"> <input type="checkbox"/> Government and Tourism Authorities: To make data-driven decisions, enhance tourist satisfaction, and boost Egypt's tourism competitiveness. <input type="checkbox"/> Local Tourism Operators and Businesses: To identify service improvements, address customer needs, and improve service offerings.
5	<p>Sustainable Development Axes Related to The Project</p> <p>Economic Growth: Enhances Egypt's tourism sector by improving tourist experiences, leading to increased tourist inflows, revenue, and job creation within local communities.</p> <p>Cultural Preservation: Helps preserve Egypt's cultural heritage by addressing feedback related to the maintenance and conservation of historical sites, ensuring these assets remain attractive for future generations.</p>
6	<p>Tools (Hardware and Software Requirements)</p> <p>Software Requirements</p> <ul style="list-style-type: none"> • Backend: MongoDB, Python. • Frontend: Angular, HTML, CSS, JavaScript.

	<ul style="list-style-type: none"> • Data Analytics & Machine Learning: Sentiment analysis libraries, data processing tools (Pandas, NLTK). • Deployment: Cloud services (AWS), Docker for containerization. 	
7	Expected Budget	
	N/A	
8	Support / Funded Entities	
	N/A	
9	Supervisor Name	Signature
	Dr. Mohamed Fouad	
10	Email	
	N/A	
11	Team Members	
	Kariem Abdelmoniem Ahmed Mohamed Ashraf Mohamed Kirolos Raouf Helmy	Ahmed Mohamed Nabil Abdelrahman Mohamed Abdelnaby Mahmoud Mohamed Sharafy