As part of our selection process, we'd like you to complete a technical assignment that aligns with our core business objectives. This assignment will help us evaluate your skills in AI-driven lead generation, a critical component of our services.  
  
Assignment: Develop an AI-Automated Lead Generation System  
  
Objective:  
Design and prototype an AI-powered lead generation system that can identify, qualify, and nurture potential leads for TAIPPA's services in the Dubai/UAE market.  
  
Requirements:  
Data Collection and Analysis:  
Utilize publicly available data sources to gather information on potential leads (SMEs in Dubai/UAE with 10-100 employees and annual revenue of AED 2-50 million).  
Implement data cleaning and preprocessing techniques to ensure data quality.  
AI Model Development:  
Develop a machine learning model to score and qualify leads based on their likelihood to convert.

Incorporate natural language processing (NLP) to analyze company descriptions and identify those most likely to benefit from AI-driven marketing solutions.  
  
Lead Nurturing Automation:  
Design an automated email sequence using NLP to personalize content based on the lead's industry and pain points.  
  
Implement a system to track lead engagement and adjust nurturing strategies accordingly.  
Integration and Scalability:  
Propose an integration plan with common CRM systems (e.g., HubSpot).  
Outline how your system could scale to handle 1000+ leads per month.  
  
Performance Metrics:  
Define key performance indicators (KPIs) for your system, including lead quality score, conversion rate prediction, and engagement metrics.  
  
Ethical Considerations:  
Address potential ethical concerns related to data privacy and AI-driven lead generation.

Deliverables:  
A detailed project proposal (max 5 pages) outlining your approach, methodologies, and technologies you plan to use.  
A high-level system architecture diagram.  
A prototype or proof-of-concept implementation of at least one core component of your system (e.g., lead scoring model, personalized email generator).  
A brief presentation (max 10 slides) summarizing your solution and its potential impact on TAIPPA's business.  
  
Evaluation Criteria:  
Technical feasibility and innovation of the proposed solution  
Understanding of AI applications in marketing and lead generation  
Attention to scalability and real-world implementation challenges  
Quality and clarity of documentation and presentation  
Consideration of ethical implications and data privacy  
  
Submission Guidelines:  
Please submit your completed assignment within 7 days of receiving this email.  
Send all deliverables in a single ZIP file to [info@taippa.com](mailto:info@taippa.com)  
Include a README file with instructions on how to run your prototype (if applicable).  
We understand this is a significant undertaking, and we appreciate your time and effort. This assignment is designed to showcase your skills and creativity in applying AI to real-world business challenges.  
If you have any questions or need clarification, please don't hesitate to reach out.  
We look forward to reviewing your submission and potentially discussing it further in an interview.