Al Madrasah Registration Form Report

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Design decisions

* 1. Creating models for all fields that had a checkbox or a radio button style.
     + This is critical to make the form dynamic, adding choices based on records in the database updates the form accordingly.
  2. Splitting the form submission into two stages: Collecting the subscriber info, create a record and then collect the payment.
     + This was essential for multiple reasons:
     + A registered payment is linked to the subscriber, thus a subscriber must be registered in the database first.
     + To calculate the payment amount, we should register the subscriber and their chosen plan first. This is to allow for splitting the amount into several transactions in an installment style of pay.
  3. The payment is simulated for demonstration purposes only.
     + This is mainly due to time constraints, a payment gateway like PayPal or Stripe is to be integrated for secure transactions.
  4. API is not currently secured by token authentication.
     + A simple JWT authentication system has been setup, but authenticating an API that doesn’t involve authenticated users since it’s a registration page will likely require signing the request with a key. This is a subject that I’ve yet to research.

# Project challenges

1. Limited experience with JavaScript and frontend frameworks.
2. A challenging timeframe to complete all required features.
   1. Due to the limited knowledge, a significant portion of development time was spent researching frontend approaches and learning basic JavaScript skills that were necessary to do the implementation properly.

# Results and Future work

1- Despite the time constraints, a functional backend and dynamic frontend form was completed and unit-tests were conducted on more than 90% of the backend code.

2- While the frontend is functional, the learning process has equipped me to further enhance it in future projects.

3- Some areas of improvement include adding translation in the backend to allow displaying options in the language of the user regardless of the language of database records, The blueprint for it was created but time didn’t allow for further research into its implementation.

4- Finishing up missing backend features like Token authentication, payment gateway integration and improving on model relations.