

EXERCISE 2.7: DATA ANALYSIS AND VISUALIZATION IN DJANGO

REFLECTION QUESTIONS

1. CONSIDER YOUR FAVORITE WEBSITE/APPLICATION (YOU CAN ALSO TAKE CAREERFOUNDRY). THINK ABOUT THE VARIOUS DATA THAT YOUR FAVORITE WEBSITE/APPLICATION COLLECTS. WRITE DOWN HOW ANALYZING THE COLLECTED DATA COULD HELP THE WEBSITE/APPLICATION.
 - IT CAN PROVIDE INSIGHTS THAT BENEFIT BOTH THE PLATFORM AND ITS USERS SUCH AS PERSONALIZED EXPERIENCE, CONTENT IMPROVEMENT, MARKETING AND TARGETING EFFORT, AND ENGAGEMENT STRATEGIES.
2. READ THE DJANGO OFFICIAL DOCUMENTATION ON QUERYSET API. NOTE DOWN THE DIFFERENT WAYS IN WHICH YOU CAN EVALUATE A QUERYSET.
 - EVALUATING A QUERYSET INVOLVES CONVERTING IT INTO AN ACTUAL SET OF RECORDS THROUGH ITERATION, SLICING, CONVERTING TO LIST, AGGREGATE FUNCTIONS, BOOLEAN, INDEXING, SERIALIZATION, AND CACHING
3. IN THE EXERCISE, YOU CONVERTED YOUR QUERYSET TO DATAFRAME. NOW DO SOME RESEARCH ON THE ADVANTAGES AND DISADVANTAGES OF QUERYSET AND DATAFRAME, AND EXPLAIN THE WAYS IN WHICH DATAFRAME IS BETTER FOR DATA PROCESSING.
 - DATAFRAME IS BETTER FOR DATA PROCESSING BECAUSE OF IT'S PERFORMANCE AND SPEED THAT OPTIMIZES FOR IN-MEMORY OPERATIONS, PERFORM COMPLEX DATA TRANSFORMATIONS WITH PANDAS, AND SEAMLESSLY INTEGRATE WITH SCIENTIFIC LIBRARIES.