**Ideas For AI**

**Requirements:**

1. You have to do research (Reading Research Papers)
2. Try to Add something new to existing ideas (New Work)
3. Show working prototype of What you are thinking.
4. You have to write a report about your work

**IDEAS:**

1. Subjective Answer Checker

**Input:**

Teacher Model Solution, Student Solution

**Output:**

Similarity, Matching Score

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Entity Detection, Synonyms, Documents Matching. (NLTK and Spacy Libraries).

**I will share other details with you.**

1. Quiz Creation on student preferences (Grade, likes, past experience etc. )

**Input:**

Students Informations, Questions Database

**Output:**

Quiz for each student

**Requirements:**

Python Programming language (Recommended), Matching Algorithms, Jaccard Similarity, Cosine Similarity, Recommendation System

**I will share other details with you.**

1. Doctor Hand Writing Detection

**Input:**

Doctor writing image

**Output:**

Extract Text from that image

**Requirements:**

Python Programming language (Recommended), Image Processing, Machine Learning Models, TensorFlow Library

**I will share other details with you.**

1. Video to Fact Database

**Input:**

Video / Images

**Output:**

Extract Different Facts using Detected Objects

**Requirements:**

Python Programming language (Recommended), Vision APIs, Object Detection, Object Classification, Extract Objects and Making Facts and Storing to database

**I will share other details with you.**

1. Images to Story Conversion

**Input:**

Image

**Output:**

Story About which this image is.

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Object Detection, Machine Learning classification, Matching Algorithm

**I will share other details with you.**

1. Searching through sound on-line and off-line

**Input:**

Sound

**Output:**

Extract Sound / File OR download Sound / File etc.

**Requirements:**

Python Programming language (Recommended), Sound Matching, Sound Detection, Sound to Text Conversion

**I will share other details with you.**

1. X-rays Images Analysis

**Input:**

X-Rays Image

**Output:**

Any Disorder

**Requirements:**

Python Programming language (Recommended), Image Processing, Deep Learning

**I will share other details with you.**

1. Natural Language To Code Converter

**Input:**

Algorithm, Natural Language, Possibly Sound Input

**Output:**

Some Programming Language (Like C#, Python, etc. )

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Entity Detection, Synonyms, tags, Sound to Text conversion.

**I will share other details with you.**

1. Efficient Trip Planner

**Input:**

User Preferences, like source, destination, food pick, restaurant etc.

**Output:**

Recommend Shortest And Fastest Path

**Requirements:**

Python Programming language (Recommended), haversine Distance formula, Routing, Shortest Path Recommendation, A-Star Algorithm

**I will share other details with you.**

1. Fruit images classification and Analysis

**Input:**

Image

**Output:**

Fruit Type, Time to ripe, Any disorder

**Requirements:**

Python Programming language (Recommended), Object Detection, Image Processing, Deep Learning

**I will share other details with you.**

1. Urdu Language Sentiment Analysis

**Input:**

Urdu Text

**Output:**

Sentiment Score

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Entity Detection, Synonyms, Documents Matching. (NLTK and Spacy Libraries).

**I will share other details with you.**

1. Urdu Entity Detection

**Input:**

Urdu Text

**Output:**

Entities Detected

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Entity Detection, Synonyms, Documents Matching. (NLTK and Spacy Libraries), urdu data tagging

**I will share other details with you.**

1. Captcha Cracker

**Input:**

Captcha Image

**Output:**

Text

**Requirements:**

Python Programming language (Recommended), Optical Character recognition

**I will share other details with you.**

1. Music Matching on basis of music instruments

**Input:**

Music Sound

**Output:**

Music Cluster

**Requirements:**

Python Programming language (Recommended), Clustering Algorithm, Matching Algorithm

**I will share other details with you.**

1. Sound to Images on the basis of sound lyrics

**Input:**

Sound

**Output:**

Images Matching to Text

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Entity Detection, Synonyms, Documents Matching. (NLTK and Spacy Libraries), Sound to Text converter, jaccard Similarity, Matching Algorithm

**I will share other details with you.**

1. Emotion Classification using face image analysis

**Input:**

Face Images

**Output:**

Emotion Detection

**Requirements:**

Python Programming language (Recommended), Image Processing, face detection

**I will share other details with you.**

1. Question Answer System for Quran

**Input:**

Sentence in Natural Langauge, Question?

**Output:**

Answer or Atleast Ayat of Quran related to that question

**Requirements:**

Python Programming language (Recommended), Natural Language Processing, Entity Detection, Synonyms, Documents Matching. (NLTK and Spacy Libraries).

**I will share other details with you.**

1. Active to passive voice converter

**Input:** Sentence in Active Voice

**Output:** Sentence in Passive Voice

**Requirements:** Python Programming language (Recommended), Expert System

**I will share other details with you.**