



**ANATOMY**  
M E N T O R

# ANATOMY MENTOR

Anatomy Mentor is an AI-based app designed to help students master the complexities of anatomy. From nerves and muscles to organs, the app's tutoring bot offers detailed explanations, generates practice quizzes, and even provides insights on uploaded anatomical images using image processing capabilities.

# Team: The Game Changers

Members



**Muhammad Ashar Ishfaq**(Team  
Leader)



**3** Amna Hassan



**5** Sheraz Anwar



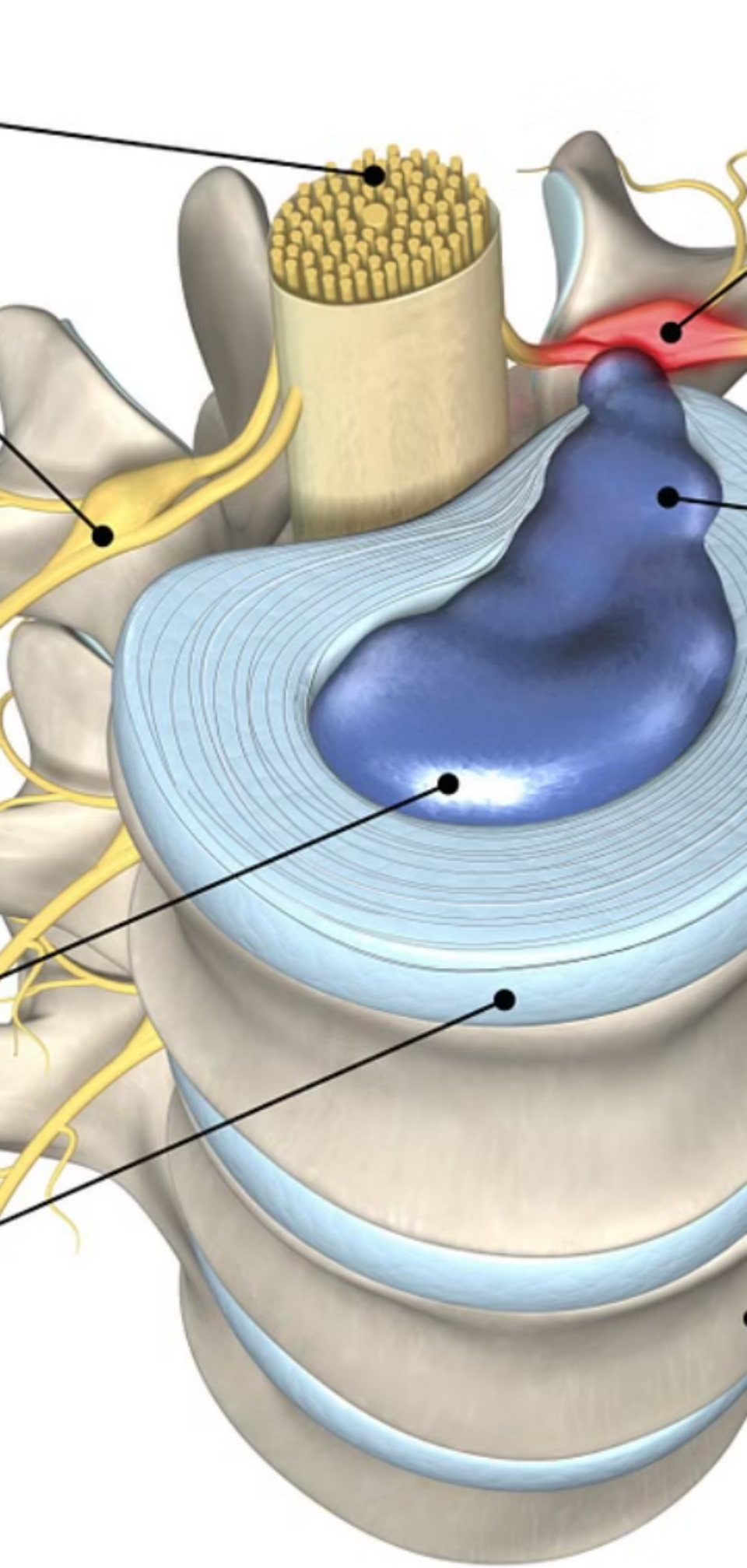
**2** Shahbaz Khan



**4** Inziam Ur  
Rehman



**6** Najmi Hassan



# Problem



## Lack of Interactive Learning

Many anatomy learning tools lack interactivity, making it challenging for students to engage with and understand complex concepts.



# Objective

## Enhanced Understanding

Our objective is to facilitate a deeper understanding of anatomy through interactive and informative learning methods.

## Anatomy

one of the foundations of medicine, it is a science that studies external and internal structure, external forms and proportions of the human body and its parts, forms of internal organization, the process of evolution, distinctive features of structure the body and individual organs, and the influence of environment. The study of human anatomy and physiology begins from basic principles. For medical students detailed study of human anatomy, human body and human Organs, identifying the human body and the mechanisms of diseases; to find new prophylactic means and to prescribe effective treatment to preserve the health and life of the patient, as well as to promote a healthy lifestyle and effective prevention of diseases.

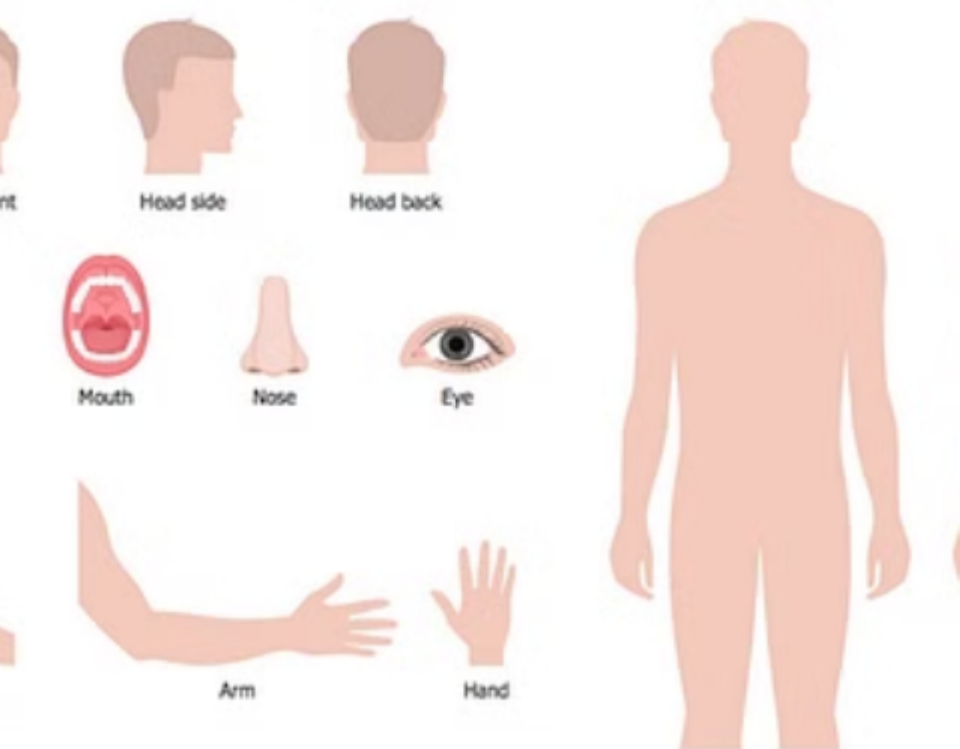
ConceptDraw PRO functionality with best vector drawing tools, samples, two libraries, which are all available in one style and one size in accordance with their anatomic size. The solution includes diagrams and illustrations for using in a sphere of medicine and health care, for making slides, presentations, diagrams and illustrations for using in a sphere of medicine and health care, for making slides, presentations, diagrams and illustrations for using in a sphere of medicine and health care, for making slides, presentations, diagrams and illustrations for using in a sphere of medicine and health care.

Buy

Info

2 libraries containing 66 vector graphics stencils for Human Anatomy solution.

## Elements — Human Body



# Solution: AI Gemini Api app 1. Explanation

The app provides personalized tutoring using AI to help students grasp anatomy concepts effectively

Explains complex anatomy topics with precision and clarity for enhanced comprehension

utilizes diagrams and 3D models to illustrate anatomical structures and functions



## 2.Evaluative

Knowledge Assessment Generates MCQs to test understanding of complex anatomical concepts and structures.

Monitors student's progress and development through comprehensive performance analytics.

Delivers personalized feedback to improve weaknesses and enhance strengths.



Olfactory  
Smell



Tactile  
Touch



Visual  
Vision

## 8 Senses

The Big Picture  
Therapy Blog Series



Auditory  
Hearing



Gustatory  
Taste



Vestibular  
Movement

# 3. Advanced Image Processing

Utilizes image processing to analyze and provide detailed descriptions of anatomical structures.

offers insights into the workings and mechanisms of uploaded anatomical structure images

Enables visual learning through detailed explanations of uploaded anatomical images.



# How its Unique

Transitions anatomy learning from textbooks to dynamic digital platforms.

interactive interface design to captivate and inspire learners

Makes high-quality anatomy education accessible to students globally.



# NATOMYMENTOR

*AnatomyMentor* Our anatomy tutoring app is designed to assist medical students in learning complex anatomical concepts with ease. Through interactive lessons, visual aids, and personalized learning features, students can delve into various anatomy topics such as nerves, muscles, and organs. The app also offers question generation for practice and incorporates image processing capabilities to analyze uploaded anatomical structure images. By leveraging the power of AI, our app aims to provide comprehensive and tailored support to enhance the anatomy learning experience for students.

## Anatomy Topic Analysis:

Please enter an anatomy topic in the sidebar.

## Question Generation:

## Anatomical Structure Image Analysis and Description:

Please upload an image for analysis.

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### Controls

Enter the anatomy topic or specific area you would like to learn more about:

Knee joint

Press Ctrl+Enter to apply

How many multiple-choice questions would you like to generate for practicing anatomy concepts?

10

Upload an image of the anatomical structure you would like to learn more about:

Drag and drop file here

Limit 200MB per file

Browse files



Knee joint

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Generate analysis and questions

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## Anatomy Topic Analysis:

### Bones

- Femur (thigh bone)
- Tibia (shin bone)
- Patella (kneecap)

### Ligaments

- **Anterior cruciate ligament (ACL):** Prevents the tibia from sliding forward on the femur.
- **Posterior cruciate ligament (PCL):** Prevents the tibia from sliding backward on the femur.
- **Medial collateral ligament (MCL):** Prevents the knee from bending inward.

## Question Generation:

### MCQs on Knee Joint

1. Which of the following ligaments is responsible for preventing excessive lateral rotation of the tibia on the femur? (A) Anterior cruciate ligament (B) Posterior cruciate ligament (C) Medial collateral ligament (D) Iliotibial band
2. What is the name of the fluid-filled sacs that line the knee joint and reduce friction? (A) Synovial bursae (B) Cartilage (C) Tendons (D) Menisci
3. Which of the following muscles is the primary extensor of the knee joint? (A) Quadriceps femoris (B) Hamstrings (C) Gastrocnemius (D) Tibialis anterior





**Thank You**