**Easy Questions**

1. **What file format does the ArthroDiagnosticImage class expect during initialization?**  
   A. PNG  
   B. JPG  
   C. MP4  
   D. Any image format
2. **What is the purpose of the \_validate\_input method in the ArthroDiagnosticImage class?**  
   A. To check if the file is accessible.  
   B. To ensure the file meets specific conditions, such as being a JPG.  
   C. To resize the input image for processing.  
   D. To convert the input file to a supported format.

**Medium Questions**

1. **What happens if the \_validate\_input method detects an invalid file format?**  
   A. It automatically converts the file to JPG.  
   B. It raises an AssertionError with details about the invalid file.  
   C. It skips the validation step and continues processing.  
   D. It logs a warning and returns a default value.
2. **What is the role of the Path object in the traceback for main.py?**  
   A. It validates the file's existence.  
   B. It ensures the file path is in a standardized format.  
   C. It converts the file path to a relative URL.  
   D. It checks for file permissions.

**Hard Questions**

1. **What error type is raised during the handling of an invalid file format in the ArthroDiagnosticImage class?**  
   A. TypeError  
   B. ValueError  
   C. FileNotFoundError  
   D. KeyError
2. **What is the significance of the second exception raised in main.py?**  
   A. It overwrites the original exception with a generic error message.  
   B. It provides additional details to debug the initialization process.  
   C. It ensures no additional processing occurs after the first exception.  
   D. It logs the error for further investigation.

**Answers and Explanations**

1. **Answer: B**  
   **Explanation:** The ArthroDiagnosticImage class explicitly validates that the input file is a JPG using the is\_jpg method.
2. **Answer: B**  
   **Explanation:** The \_validate\_input method ensures the file format is correct (JPG) to prevent downstream errors during image processing.
3. **Answer: B**  
   **Explanation:** If the \_validate\_input method detects an invalid file format, it raises an AssertionError, halting further processing and providing details about the issue.
4. **Answer: B**  
   **Explanation:** The Path object in main.py ensures the file path is standardized, simplifying operations like validation or file access.
5. **Answer: B**  
   **Explanation:** After the AssertionError is handled, the ValueError is explicitly raised to indicate initialization failed due to an invalid file format.
6. **Answer: A**  
   **Explanation:** The second exception in main.py overwrites the original AssertionError with a more generic ValueError, providing a cleaner message for external handling while hiding implementation details.