

ASSIGNMENT 3:

SUBMITTED BY:

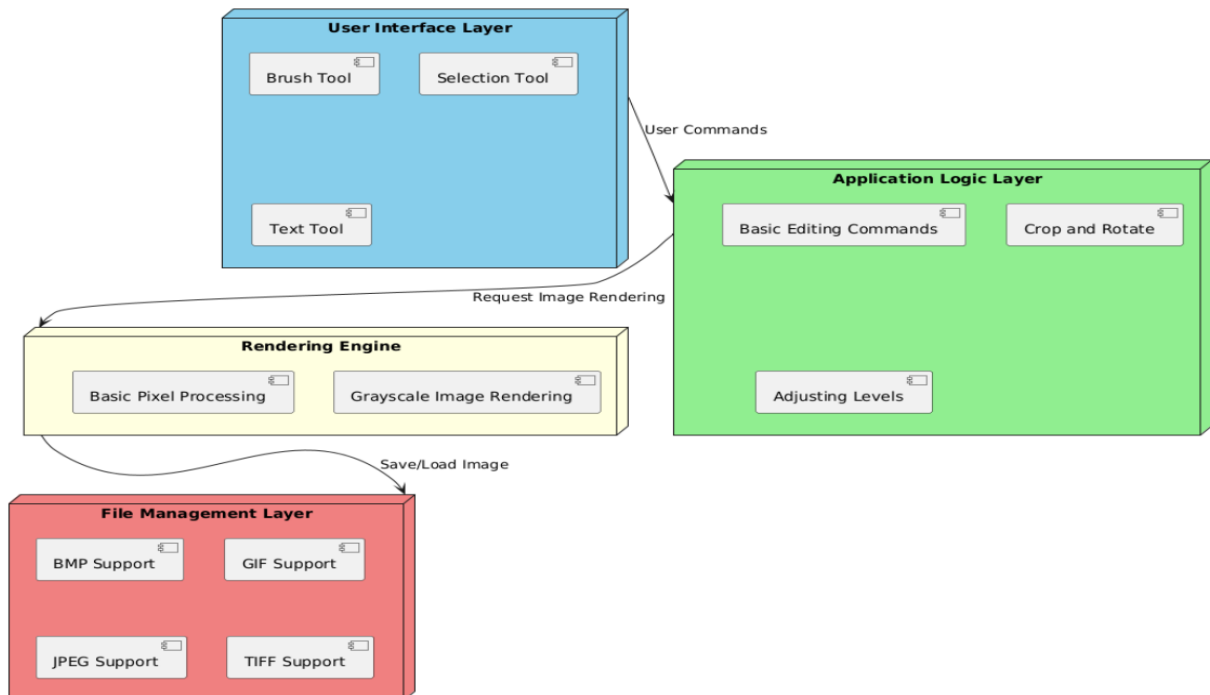
- AREEBA KHAN (FA22-BSE-008)
- MUHAMMAD ABUBAKAR (FA22-BSE-155)

ADOBE PHOTOSHOP: EVOLUTION AND ARCHITECTURAL REPORT

▪ ADOBE PHOTOSHOP 1.0 (1990)

- Release Number: 1.0
- Major Features:
 - Grayscale editing.
 - Basic image retouching tools like crop, levels, and rotate.
 - Supported file formats: BMP, GIF, JPEG, and TIFF.
- Release Notes:
 - The software was released for Macintosh computers.
 - Simple architecture designed for single-threaded processing.

Photoshop 1.0 Architecture



▪ **ADOBE PHOTOSHOP CS6 (2012)**

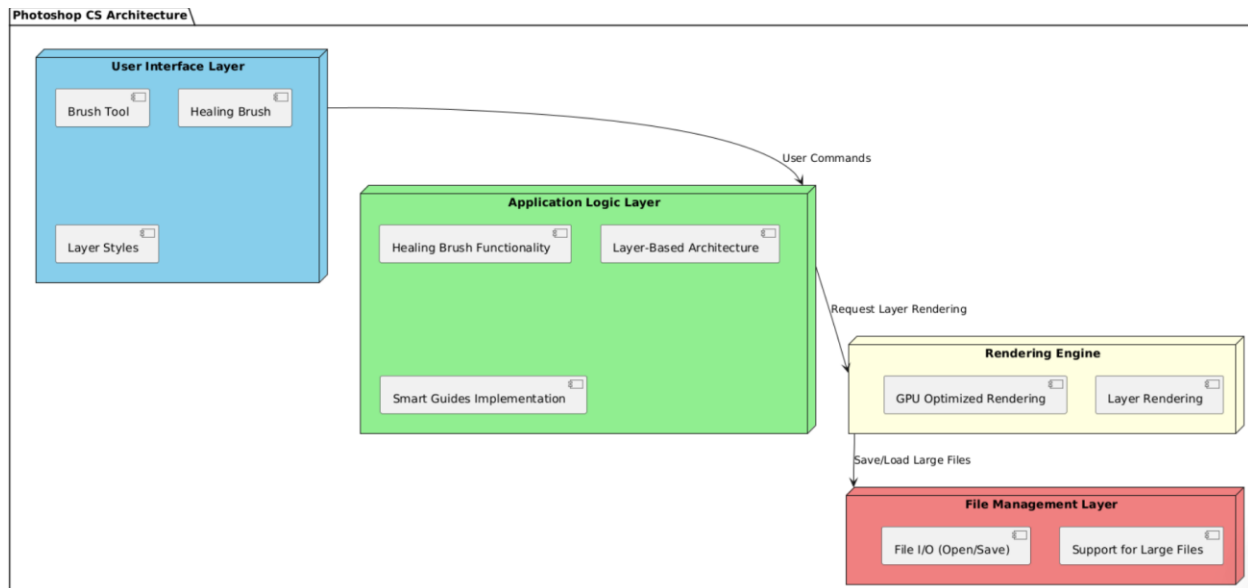
- **Release Number:** Photoshop 13.0

- **Major Features:**

- Content-Aware Patch tool for advanced retouching.
- Blur Gallery for creating artistic blur effects.
- Mercury Graphics Engine for GPU acceleration.

- **Release Notes:**

- Optimized for 64-bit systems, improving performance.
- Advanced layer editing capabilities were added.



▪ **ADOBE PHOTOSHOP CC (2013)**

- **Release Number:** Photoshop 14.0

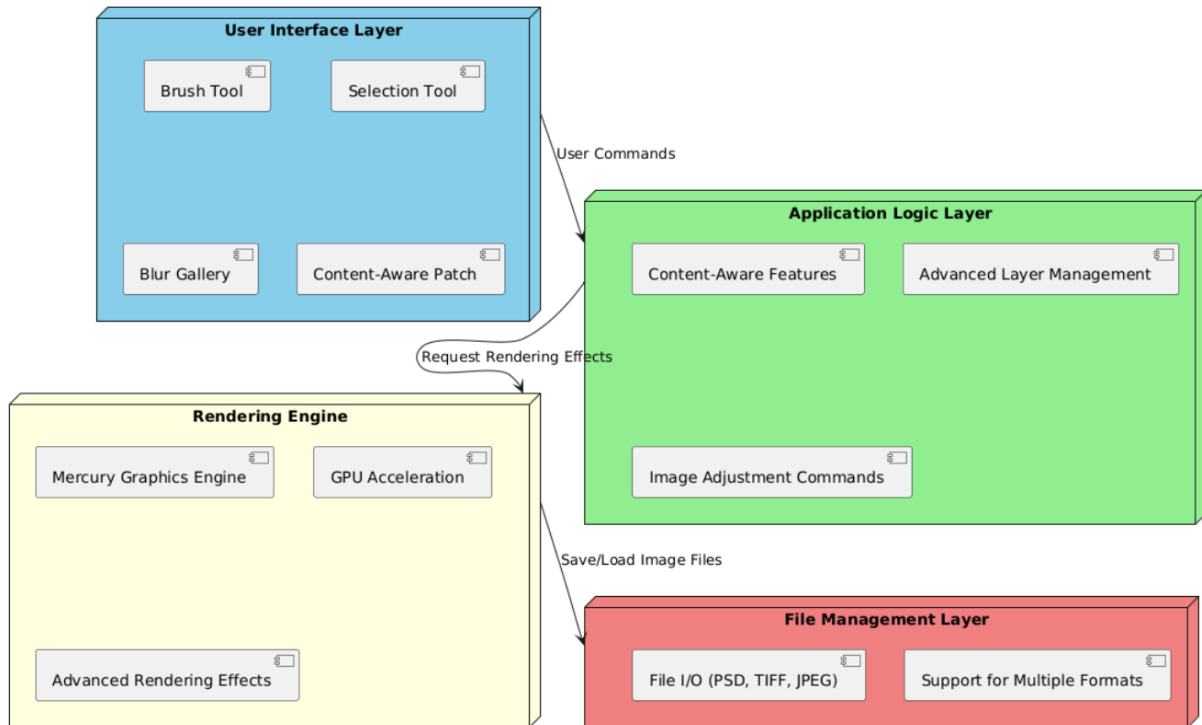
- **Major Features:**

- Cloud-based storage for collaboration.
- Linked Smart Objects for better workflow management.
- Camera Shake Reduction tool for correcting blurry images.

- **Release Notes:**

- Transitioned from standalone software to a subscription-based model.
- Integrated deeply with Adobe Creative Cloud for file sharing.

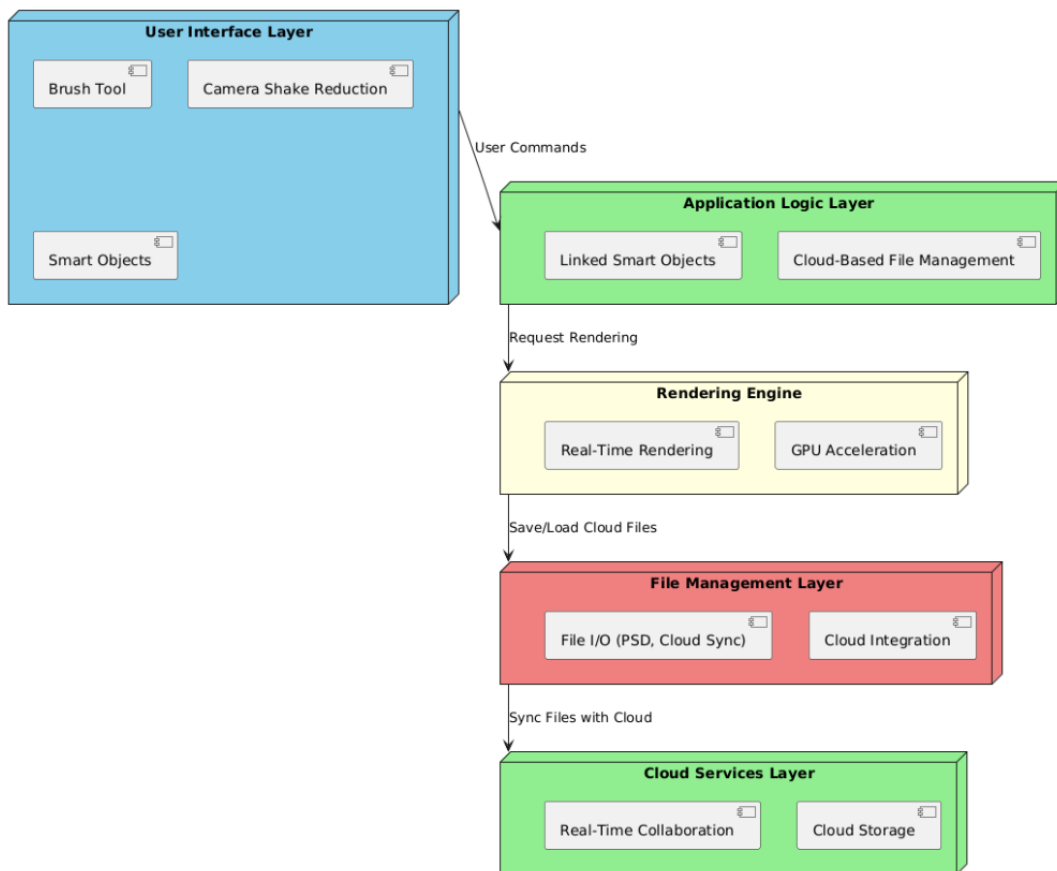
Photoshop CS6 Architecture



■ **ADOBE PHOTOSHOP 2023 (LATEST VERSION)**

- **Release Number:** Photoshop 24.x
- **Major Features:**
 - AI-powered Neural Filters for quick image adjustments.
 - Enhanced object selection tools for precise edits.
 - Cloud documents for collaborative editing in real-time.
- **Release Notes:**
 - Deep integration with machine learning and AI technologies.
 - Support for cloud-based workflows, improving team collaboration.

Photoshop CC Architecture



▪ **ARCHITECTURAL DIAGRAM**

Adobe Photoshop follows a **modular architecture** consisting of the following layers:

1. **User Interface Layer**

- Tools like brushes, selection tools, and menus.

2. **Application Logic Layer**

- Processes commands like applying filters, adjustments, and layers.

3. **Rendering Engine**

- Handles image rendering and effects, including GPU acceleration.

4. **File Management Layer**

- Manages supported file formats like PSD, JPEG, and PNG.

(Insert a diagram showing these layers, which can be created in Word or PowerPoint.)

▪ CONTRIBUTIONS OF GROUP MEMBERS

Since our group consists of only two members, the contributions are divided as follows:

Member 1:

- Researched the evolution of Adobe Photoshop.
- Collected release notes and architectural details for key versions.

Member 2:

- Created an architectural diagram.
- Compiled and formatted the final report into a Word document.

▪ ARCHHITECTURE DIAGRAM:

