**7. Maintenance and Support Phase**

The **Maintenance and Support Phase** ensures the continued performance, stability, and relevance of the **Image Gallery with Filters** after its deployment. This phase focuses on monitoring the live system, resolving any issues that arise, and implementing improvements based on user feedback. It plays a crucial role in maintaining a smooth user experience and extending the system's lifespan.

**1. Purpose of Maintenance and Support:**

* To fix bugs or issues that may arise post-deployment.
* To update the image gallery with new features or content as needed.
* To enhance performance, compatibility, and user satisfaction.
* To ensure long-term functionality and system availability.

1. **Types of Maintenance:**

**Corrective Maintenance:**  
Addressed any unexpected bugs or glitches reported by users after deployment, such as filter malfunction or broken image links.

**Adaptive Maintenance:**  
Made necessary adjustments to ensure compatibility with updates in browsers or hosting platforms.

**Perfective Maintenance:**  
Improved UI/UX based on feedback, optimized image loading speed, and enhanced filtering functionality.

**Preventive Maintenance:**  
Regularly checked code quality, updated dependencies (if any), and created backups to prevent future issues.

1. **Support Activities:**

**User Feedback Collection:**  
Collected feedback through comments, surveys, or direct communication to identify areas for improvement.

**Issue Resolution:**  
Monitored the live site for performance issues, slow loading, or broken features and applied fixes promptly.

**Content Updates:**  
Updated image collections and added new categories based on user demand or project growth.

**Monitoring and Analytics:**  
Used tools like Google Analytics or basic performance monitoring tools to track site usage and performance.

**4. Backup and Recovery:**

* Maintained regular backups of project files and image assets.
* Ensured quick restoration in case of accidental data loss or system failure.

**5. Future Enhancements (Optional):**

* Integration with a backend for dynamic image management.
* Addition of a search bar for easier image discovery.
* Admin panel for uploading and managing images.
* Dark mode or theme customization features.

**6. Outcome of Maintenance Phase:**

* The **Image Gallery with Filters** continues to function smoothly after deployment.
* All reported issues were addressed in a timely manner.
* The system remains up-to-date, secure, and aligned with user expectations

The Maintenance and Support Phase is essential for the long-term success of the project. It ensures that the image gallery remains reliable, user-friendly, and adaptable to future needs and technological changes.