# **1.3 Objective of the Project**

The primary objective of this project “Capital Radiology - Online System” is to streamline and digitize the MRI scan management process. This can be accomplished by building a secure , accessible and user friendly web portal for patients , radiologists and administrative staff. This system is designed to make the MRI scan process more efficient.

Following are the objectives for the system:

1. **Secure Authentication Process:** Develop an encrypted ,secure and role based login system , to ensure only authorized users can access the specific system and patient data.
2. **Web Portal Implementation:** Develop a responsive and user friendly web-based platform for managing MRI appointment, image uploads , report generation and communication.
3. **Storage of MRI Images**: Encrypted storage system to store , retrieve and upload images of MRI scans in standard format (i.e. DICOM) , The images link to patient records and can be accessed by the patient and the assigned doctor.
4. **Designing the Report :** Template based medical reports which allow radiologists to generate structured medical reports which are reviewed , signed and shared digitally.
5. **Leakage Record Prevention:** Implement Strong Security Protocols like access-control , access- logs and Encryption to maintain confidentiality of sensitive health records.
6. **Doctor’s Prescription to the patients:** Develop a secure portal between patient and assigned doctor which will enable the doctor to send prescriptions and recommendations to the patient. This will eliminate the need for in-person visits.
7. **Billing and Payment Management:**  Secure Payment system which will allow patients to pay for the services through their credit/debit card or through their insurance claims directly through the web portal.
8. **Internal Communication and Co-ordination:** Secure Messaging system between patients and doctor as well as internal communication among technician , admin , doctors and staff.
9. **Audit , Compliance and Reporting Analysis:** Access-logs, Usage - report and activity logs are generated for audit and compliance purposes. Strong encryption system is implemented to safeguard patient’s personal information and to prevent unauthorized access.