SE412 Software Project Management
Assignment – FYP

Program: BS (CS)
Session: FALL 2023
Subject: **SE412** Software Project Management

SECTION: A

FYP: TELEDOCTOR (SKIN)

GROUP MEMBERS:

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Methodology:

1. Charter for the Project:

a. Specify the project's purpose, aims, and targets.

PROJECT PURPOSE:

The purpose of our project “TELEDOCTOR (Skin)” is to develop a web application for dermatologists and for the ease of doctors or patients to improve access to healthcare and streamline diagnosis and management of skin diseases.

PROJECT AIMS:

Enhance accessibility to healthcare in rural and remote areas, provide a virtual platform for dermatological consultations, and incorporate innovative AI features for efficient disease detection. Provide ease in communication for the doctor and patient that doctor can prescribe the medicine after diagnosing the disease and patient can choose any doctor by their own choice.

PROJECT TARGET:

Reach patients and healthcare providers in underserved areas, reduce the time between diagnosis and treatment, and contribute to overall improvement of dermatological healthcare. Project target is that our system should detect the accurate skin disease and web application should deploy smoothly and properly.

b. Identify the primary individuals or groups who have a significant interest or influence on your project or decision, and describe their specific responsibilities and functions.

IDENTIFY PRIMARY INDIVIDUAL OR GROUPS:

- Patients residing in isolated and rural regions.
- Medical professionals and dermatologists.
- The group working on the project.

PARTICULAR RESPONSBILITIES OF PRIMARY INDIVIDUALS AND GROUPS:

- The patient, who is also our client, will use our web application to schedule appointments with doctors by using an appointment panel that shows the doctors' availability, fees, and names. The patient then enters their image into the web application to receive a diagnosis.
- Dermatologists are our medical professionals who will use application to identify our patients' skin diseases and recommend a medication or treatment for those conditions. Dermatologists and skin care specialists are also healthcare providers who will offer good quality treatment and consultations to patients.
- The patient, who is also our client, will use our web application to schedule appointments with doctors by using an appointment panel that shows the doctors'

availability, fees, and names. The patient then enters their image into the web application to receive a diagnosis.

- Dermatologists are our medical professionals who will use application to identify our patients' skin diseases and recommend a medication or treatment for those conditions. Dermatologists and skin care specialists are also healthcare providers who will offer good quality treatment and consultations to patients.

We have three members in our project team. Ameema, Fiza and Mahnoor. Mahnoor is our project manager and leader. Ameema is an expert in artificial intelligence, training the Convolution Neural Network model while Mahnoor handles the testing phase and Fiza handles the development phase. We are gathering skin image datasets from various dermatologists and hospitals, sketching out our project's concept in a rough paper, and then creating a prototype and documentation for it. Following this, we're putting some code into practice, similar to training the CNN model. Our model is being trained in this to analyze images and identify the three main diseases: ringworm, foot fungus, and nail fungus. Once our model has trained, the user can input their image and our model will predict whether they have ringworm, nail fungus, or foot fungus. Following the detection of our model, patients will receive an appointment panel from which they can choose to see a male, female, or other dermatologist who treats skin diseases. Following the appointment, the patient and the physician can communicate via our platform. The physician will use the patient's information to insert the prescription. Thus, our entire team is keeping a careful and accurate eye on everything.

c. Present a comprehensive summary of the characteristics and functions of your Final Year Project (FYP).

CHARACTERSTICS AND FUNCTIONS OF TELEDOCTOR SKIN:

- Development of a web application for patients in regular areas and dermatological consultations.
- The patient uploads an image of their diseased skin, which the doctor examines by detecting it after the patient's appointment.
- All patient health records are available through our web application.
- The use of AI to detect diseases. For example, a model Convolution Neural Network can be trained to extract features from photos of the skin.

TELEDOCTOR (Skin) is a groundbreaking web application designed to revolutionize dermatological healthcare, bridging the gap between patients in rural and remote areas and dermatologists. The project encompasses a comprehensive set of features aimed at enhancing accessibility, streamlining consultations, and incorporating cutting edge AI for efficient disease detection.

KEY CHARACTERISTICS AND FUNCTIONS:

- EASY TO ACCESS GEOGRATIC: It will center on the healthcare of those living in remote areas.
- CENTRAL PATIENT FEATURES: Make it simple to schedule dermatology.
- CONSULTATION APPOINTMENTS: The uploading of skin dataset images to dermatologist experts is made easier by our application.
- A VIRTUAL PHYSICIAN'S ASSISTANT FOR DERMATOLOGISTS: A doctor's notepad is an essential tool for dermatologists, as they use it to record patient medication orders. It makes effective diagnosis and image annotation possible.
- OVERVIEW AND MANAGEMENT: Simplifies the prescription writing process for physicians and guarantees patient ease of use. It improves patient follow-up and medication adherence.
- AI-POWERED DETECTION OF DISEASE: For our online application, we employ artificial intelligence features such as labeling the skin image dataset's data before preprocessing and segmenting the skin images.
- COMPREHENSIVE VIRTUAL RECORD: The first is comprehensive virtual health records gives patients access to their medical history easily with a virtual health record folder.
- INTERFACE DESIGNED FOR USERS: Physicians and patients will find it easier to comprehend the overall web application thanks to the user interface. Encourages usability, guaranteeing accessibility for people with different degrees of technical expertise.
- Interaction AND DISCUSSION: Additionally, our app facilitates quick communication between the patient and the physician. For example, a doctor can use it to quickly diagnose a skin condition and prescribe medication for a patient.
- PROJECT IMPACT AND VISION: In the future of healthcare, dermatological services won't be limited by geography, according to TELEDOCTOR (Skin). The initiative aims to empower healthcare providers and patients alike.

2. Scope Statement: (Follow the template provided)

a. Precisely delineate the extent and boundaries of your software project.

PROJECT BOUNDARIES:

- Our primary focus is on isolated and rural areas.
- Dermatologists will have access to this web application for diagnosis and consultations.
- We are making this web application specifically for patients, doctors but Remote area people like patients and for different cities people also who can't afford costly doctors and special treatment by doctors at their clinics.

b. Enumerate the characteristics and capabilities included in the first launch.

INCLUDE IN FIRST LAUNCH:

- The patient uploaded an image, which the doctor used this web application to analyze for disease.
- For dermatologists, we have included an online doctor pad through which they can prescribe medication or anything else to their patients.
- Prescription management is also included; a doctor will write an online prescription for any medication they wish to give a patient.
- The CNN algorithm, which extracts features from skin images and diagnoses the condition, is used in model training for AI (ML) disease detection of skin images. In addition, we'll segment our data set of skin image preprocessing. We will perform any necessary image enhancement or sharpening during the preprocessing stage.
- Appointment scheduling.

c. Enumerate any features or functions that are specifically excluded from the scope.

EXCLUDED FROM SCOPE:

- Non dermatological healthcare services
- Payment method.

3. Project Cost Management

a. Prepare and present the variance reports and earned value reports of your FYP (This is mainly used in the monitoring and Controlling Process Group).

EARNED VALUE (EV) REPORT:

i. Dataset Collection:
   - Planned value: $19.23
   - Earned value: $19.23
   - Actual cost: $19.23
   - Cost performance index (CPI): EV/AC=$1
   - Schedule performance index (SPI): EV/PV=$1

ii. Graphic Tablet (Doctor pad):
   - Planned value: $60.17
   - Earned value: $132.24
   - Actual cost: $132.24
   - Cost performance index (CPI): EV/AC=$1
   - Schedule performance index (SPI): EV/PV=$2.19777298

iii. Printing cost:
- Planned value: $6.01
- Earned value: $6.01
- Actual cost: $24.04
- Cost performance index (CPI): EV/AC=$0.25
- Schedule performance index (SPI): EV/PV=$1

4. Resource Management:

a. Identify the human and material resources required for the project.

Our three-person team is in charge of creating, evaluating, and training the AI model. Mahnoor, our project manager, is in charge of the testing phase. Fiza is finishing up the developing phase, and Ameema is working on the AI model's training.

This web application is being created with a variety of tools, including Visual Studio Code, HTML, CSS, and JS for the front end, JavaScript for the back end, SQL Lite for database connectivity, and Convolution Neural Networks (CNN) for model training.

b. Develop a resource allocation plan.

By allocating particular tasks to our assigned tasks, we are creating a plan for the allocation of resources.

- BACKEND AND FRONTEND: Fiza is working on the front end and back end of the project. Mahnoor is creating the back end using JavaScript and SQL Lite and Golang database connectivity, while Fiza is creating the working prototype.
- Ameema is training the Convolution Neural Network model, which is useful for detecting skin diseases because it can automatically extract hierarchical features from images. Ameema is an expert in artificial intelligence.

c. Consider any potential risks and develop a risk mitigation plan.

- RISK POSSIBLE: In remote areas, there is poor internet connectivity.

PLAN FOR RISK MITIGATION: Provide offline functionality for the application so users can still access key features even when their connection is unstable. Give precise instructions on the minimal amount of network needed, and provide other ways to communicate, like SMS or phone calls.

- RISK POSSIBLE: Technical obstacles for users.

DESIGN FOR RISK MITIGATION: Provide comprehensive training materials and user-friendly interfaces for physicians and patients alike. Test the usability of the product to find and fix any possible technical obstacles.

- RISK POSSIBLE: Limited healthcare professional access.

DESIGN FOR RISK MITIGATION: Risk Reduction Form alliances with regional healthcare associations or assemble a group of medical experts who are open to taking part in virtual consultations. Make sure the system is scalable to meet the rising demand for healthcare services provided remotely.

5. Quality Management:

a. Specify the quality standards and criteria that pertain to your software.

- USER EXPERIENCED STANDARDS: Design that is responsive and intuitive.

QUALIFICATIONS REQUIREMENT: Greater user satisfaction scores and input from user testing.

- RELIABILITY AND AVAILABILITY: Establish backup plans and carry out routine system maintenance.

QUALIFICATIONS REQUIREMENT: stable system operation even at high usage.

- ADOPTIVE TO THE HEALTHCARE REGULATORY CRITERIA: adherence to regional, international healthcare standards and regulations for TELEDOCTOR application.

QUALIFICATIONS REQUIREMENT: Updates on a regular basis to the documented complete measures and evolving regulations.

- RECOMMENDATIONS FOR FEEDBACK AND IMPROVEMENT CRITERIA: Create a system for user feedback and keep an eye on user reviews.

QUALIFICATIONS REQUIREMENT: Ongoing development based on user input; if necessary, add new features or improvements to meet user needs.

b. Outline the procedures for testing and ensuring the quality of a product or service (FYP).

We utilize a process called manual testing to test our product. There are two types of testing that fall under this category: white box testing and black box testing, which are used in website applications.

We maintain the quality of our products in this way. The screenshots for this testing will be pasted onto the report.

c. Outline the strategies your team will use to guarantee that the project fulfills client requirements (FYP).

- We have the strategies that our team will use to guarantee for our project that fulfills client requirements.

- Our clients will be our doctor and patients in this web application of TELEDOCTOR (Skin) because by this application we are providing ease both users, doctors and patients.
- Conduct deeply discussions and meetings with clients to understand their vision and expectations for TELEDOCTOR (Skin).
- Developing prototypes to visually represent the user interface and key functionalities, sharing these prototypes with client for their feedback.

We are basically making this online web application for the ease of rural area peoples who can't afford the expenses of urban area doctors and in remote area there are not as much as many hospitals and civilized doctor too, either female doctor in there appointment status.

Additionally, our application satisfies the needs of doctors, who can use it to view the online uploaded image of their patient and, upon identifying the patient's ailment, prescribe medication through the use of a doctor pad. So that it will be simple for both of our clients, and our application ought to satisfy their needs.

6. Risk Management:

a. Identify possible risks linked with your software development project.

- Vulnerabilities: Related to security: Since patient data must be accessible to all parties in the record, there is a chance that it will be used improperly or lead to security problems when utilizing this web application.
- Performance problems: A sluggish application can negatively impact accessibility and user experience by producing a slow response time.
- Technical integration issues: Complicating the app's integration with the infrastructure and systems already in place in the healthcare industry.
- Limited user adoption: Given that we are creating this application for TELEDOCTOR (Skin), it's possible that in the future, there won't be as many people using it.

Our project will be at high risk if we have limited resources and face difficulties acquiring data. This is also possible if our application responds slowly because multiple doctors and patients will be using it simultaneously.

Our project will be at great risk if there is a breakdown in communication between our project manager and team members. This is because we won't be able to effectively collaborate with our team and deliver the required results to meet the needs of our clients.

There will be a risk if our team members are unable to deliver the expected results and outcomes in accordance with the tasks assigned by the project manager and supervisor, resulting in a task that is completed late and does not meet our software requirements.

b. Evaluate the influence and probability of every risk.

We are identifying potential risks to our project going forward.

- Patients may receive a false diagnosis if our model is unable to diagnose conditions correctly.
- Because user information is so private, we are aware that a leak could erode users' confidence in us and cause them to stop using our app.
- It would be a difficult task to compile with medical practices from various regions.
- We are aware that there may be technical difficulties in rural areas, which could make our platform unavailable.

RISK OF PROJECT PROBABILITY:

- Patients may suffer harm if our system is unable to diagnose conditions accurately.
- If our system is unable to diagnose correctly, there is a high risk of impact.
- There is a medium risk likelihood of model training challenges.
- Due to improved data quality, there is little chance of controversy.

RISK OF PROJECT PROBABILITY:

- If our project's goals and scope are clearly stated, there is little risk.
- If there is some ambiguity in the project's requirements and scope, the risk is medium.
- If the project scope is unclear and we have insufficient resources and dataset for our web application, there is a high risk to our project.

c. Create a risk response strategy to minimize or resolve identified hazards.

Various risk response strategies are available to mitigate the identified hazards.

- Using secure authentication techniques to limit access to sensitive data is the first response risk strategy.
- All we need to do is work with some legal and safety professionals.
- All we need to do is keep up our support efforts for users who are having technical difficulties.
- We plan to continuously monitor and evaluate the risk response strategy's efficacy.
- Create clear channels of communication for our users, including doctors and patients, via Facebook, WhatsApp, and email.
- If the image input is unclear, which indicates that the image quality is poor and the doctor cannot correctly recognize the image, we will need to set up backup procedures for sending the patients' images to the doctors via email and WhatsApp.

7. Communication Strategy:

a. Create a comprehensive communication strategy that outlines the methods and channels via which information will be disseminated to team members and stakeholders.

- To ensure that the manager and the team communicate in a timely and transparent manner.
- It will facilitate communication and allow the team to jointly celebrate the project's success.

- Using a communication strategy, we informed the project manager and supervisor of the project's advancement and successes.
- By means of a communication plan, each team member will provide feedback and suggestions.

MEDIA METHODS:

- Daily Stand-up Meetings: two-hour get-togethers to discuss achievements, challenges, and future plans.
- Project Management Platform: Use a platform like WhatsApp, Email, or Microsoft Teams to assign tasks, monitor progress, and share documents.
- Internal Communication Channel: Create meetings or channels on various platforms, such as Zoom and WhatsApp, to communicate with team members.
- Weekly Team Meetings: six-hour sessions to discuss project status and brainstorm potential solutions.
- Monthly progress reports: Written summaries that focus on significant achievements, challenges faced, and upcoming objectives.

We use email, WhatsApp, and Microsoft Teams for team communication. We exchange project documents and the task that the project manager assigned us via these channels of communication. We're discussing our progress and different strategies for resolving the problems with our project. During our instant chats, our project manager discusses any problems that may arise with our project. Every week, we send in our tasks via email, and our project manager updates our supervisor on the progress of each assignment. Our project leader assigns tasks to each team member at Email, and once those tasks are finished, everyone is informed via the Email channel. Our project manager, Mahnoor, discusses the project's accomplishments once a week.

b. Determine the communication methods used and how frequently updates.
COMMUNICATION METHODS :

- Project Meetings: To discuss the project, our project leader meets once a week for at least two hours.
- Weekly updates on the project management platform: We use the email platform to discuss our project's status in a document or after finishing a report.

We give Mahnoor, our project manager, a weekly update on our work. We inform our project leader and supervisor on our work every week because we believe that communication is essential. She keeps us updated during the meeting call if there are any problems or errors with our task.

8. Change Management:

a. Implement a systematic approach to managing modifications to the project's scope or requirements.

a) CHANGE REQUEST DOCUMENT:

Submission of Change Requests: In the initial stages of our project, all we need to do is identify the skin condition, and the system will create a report by providing patient information. However, when we reach a milestone, we make some changes to our project. For example, instead of initially developing a system for diagnosing skin diseases, we will now develop a web application for people living in remote areas who cannot afford to see city doctors because there aren't any good skin disease hospitals or doctors in rural areas. In order to complete our project, a web application for patients and doctors must be implemented. Patients simply upload an image to the doctor, who will then use doctor pad to prescribe medication. The doctor will be able to diagnose skin diseases online.

b) CHANGE REQUEST DOCUMENT SUBMITTED:

- The Request Completion Document ought to include information such as: In the event that our project requires any changes or modifications, we will give our project leader a document that includes an overall description of the project.
- We will assess the effects of this modification or change on the resources, schedule, and scope of our project and work together as a team to manage those changes.
- In collaboration with the entire team, we will also provide a solution for this change request or a modified version of our project.
- After the discussion, we will compile the entire document and send it to our project manager for approval.

c) IMPLEMENTATION OF CHANGE AND MONITORING IT:

Our project manager will assign the change request document to each team member if it is approved.

The project manager will keep an eye on the implementation procedure and guarantee that the authorized plan is followed.

The project manager will monitor the changes that have been put into place and evaluate how they are affecting the project.

d) COMMUNICATION AND DOCUMENT:

All project management tools and documents will be updated and changed to reflect any changes.

To make sure that everyone is informed of the most recent project modifications, regular communication will take place.

b. Specify the process for assessing, authorizing, and executing change requests.

a) SUBMIT THE CHANGE DOCUMENT:

Should a change be necessary, we will submit a request for a change to the document.

Important details such as the following should be included in the change request document:

- Every modification will be detailed in a description or change document.
- We will provide an explanation of the possible effects of any changes on the project's resources, schedule, and scope.
- The solution that our entire team will choose is also included in the form.
- We will also talk about the potential risks that could arise from implementing this change solution.
- Lastly, we will turn in the form to our supervisor, who will then forward it to the head of the department handling the senior project.

b) APPROVAL FOR CHANGE:

- After analyzing the project modifications, our group leader Mahnoor will determine whether or not to submit a change request form.
- It will be sent to our supervisor if the project leader approves it.
- It will be sent to the head of the final year project if our supervisor approves it.

c) IMPLEMENTATION OF CHANGE:

- All team members will be given the change request document for a subsequent performance task if it is approved by the project manager and supervisor.
- The project manager will then give each team member a task related to the approved document.
- The approved task or work will then be carried out in accordance with the document requesting the change.

d) MONITORING AND ASSESS:

- The assignment assigned to our entire team will be assessed by our project manager.
- The project manager assigns the work in accordance with the provided document, and if any problems arise during execution, they assess our work.

- In the event that problems arise, she will work with the group member or the supervisor to find a solution.

9. Monitoring and Control:

a. Outline the methodology for monitoring project progress.

✓ QUANTITY OF DOCTOR AND PATIENTS:

We are keeping an eye on the number of users who will sign up for our application in the future. For example, if doctors and patients register themselves through our application, our entire team should be keeping an eye on the number of doctors and patients who have registered themselves through this application (Medicals and patients).

If a patient uploads a picture of a skin condition, our staff should monitor it. If there are any issues, such as slow upload speeds, we will handle them and give our clients a check and balance.

- We'll be keeping an eye on how quickly, accurately, and quickly our application can diagnose a patient's condition.
- We'll track how long it takes our system to accurately diagnose and detect the patient's ailment.
- We'll monitor the level of satisfaction our patient or client experienced with our application. Using this application, we will assess the degree of patient satisfaction.
- We will keep track of the number of prescriptions generated or issued each day by our online web application. Thus, our app gave our doctors access to the prescription method feature as well.

✓ QUALITY OF APPLICATION:

Our team will monitor that what will the feedback of our patients while using our platform for their ease .If some issues will held by our side with this application so we will control it at an instant time by collaborating with other team members.

- We will also evaluate the doctor feedback for our model accuracy that our system works properly or not.
- Overall we will evaluate project performance for meeting goals and helping rural areas people.

✓ TECHNIQUES AND TOOLS FOR MONITORING :

- Software for project management: Track tasks, deadlines, and milestones with the help of apps like WhatsApp and email.
- Feedback forms: To acquire qualitative information about users' and physicians' experiences and satisfaction, conduct surveys on a regular basis and solicit feedback.

✓ REGULAR MEETINGS:

Arrange for weekly or virtual gatherings to assess advancements, deliberate on obstacles, recognize possible hazards, and implement remedial measures as required.

- Promote candid communication and teamwork among team members to guarantee that priorities and project goals are understood by all.

✓ TRACK PROJECT PROGRESS:

Generate reports that provide an overview of the main purpose, conclusions, and learnings from the different operations.

- Model accuracy: To guarantee patient trust and confidence in the platform, concentrate on obtaining a high degree of accuracy in skin disease detection.
- Data security and privacy: Adopt strong security measures to safeguard user information and abide by applicable data privacy laws.

b. Determine the essential metrics, known as key performance indicators (KPIs) that are used to evaluate the achievement of project objectives.

Key Performance Indicators for TELEDOCTOR (Skin):

✓ ADOPTION OF USERS:

- Users who have registered: The number of users who have signed up for our application will be monitored.
- User count: This will indicate how many people are utilizing this application.
- Target users: Due to their ease of use at home, we are primarily aiming our web application at residents of rural areas.
- Patient Engagement: Number of skin image uploads: This metric measures the number of patients who were able to interact with our application and the number of patients who uploaded images of skin diseases.
- Time spent on the platform: It will calculate how much time our patient spends using the application, including the time needed to upload an image of a skin condition and receive medical advice.
- Patient satisfaction rate: Determine how satisfied our patients are with the application and what comments they have made.

✓ EXECUTION OF MODEL:

- Disease detection accuracy: We measure the Convolution neural network model's efficacy in accurately identifying skin diseases.
- Precision: The degree to which our CNN model will correctly categorize skin conditions is how we are testing it.
- Engagement and Performance of Physicians: Count of Registered Physicians: We will monitor which doctors utilize our apps and ascertain which doctors are available to see patients who register via this app.
- Physician satisfaction rate: We will assess the physician satisfaction rate, which shows our doctors and patients how accurate and simple it is to use.
- The quantity of prescriptions filled: Shows how well the platform facilitates treatment suggestions.

c. Provide a step-by-step description of the procedure for making modifications to the project plan, if deemed required.

- We will create a system for detecting skin diseases in which the patient reports a skin disease, the doctor diagnoses it, and a report is then generated.
- However, there are some changes to our project that will require us to launch the web application at the conclusion. This is the remote area people's application.
- As a result, we have modified the website so that it primarily serves residents of the regular area who are unable to pay quality medical care. Although we are concentrating on remote areas for our application deployment, it is not specifically stated that people in urban areas cannot use this application.
- Our web application has been enhanced with an additional modification that gives users the option to select between a male or female doctor when using it.
- After that, a doctor can give a patient an online prescription, and this online web application will handle the prescription process as well. Our web application has been modified to include the addition of doctor pads. Our doctors can write on a pad or on paper with ease thanks to it.They can use this pad to make video calls, write anything, or prescribe medication while using a pointer.

Because we are aware of the project's objective and solution, our project falls under the waterfall project management category. Our project's solution requires us to set up a web application for people living in remote areas, giving them convenience by allowing them to use it at home and consult with doctors about skin conditions. We are the three people working on this application together.

PROJECT MANAGEMENT APPROACH FOR OUR PROJECT TELEDOCTOR (SKIN):

Since waterfall methodology is a traditional approach that may work for our clearly defined project requirements for example, we are developing an AI-generated tool to diagnose skin diseases—we are using it.

Before going on to the next step, each stage's planning, development, testing, and deployment will be finished. Every milestone and deliverable will be assess and through our monitoring and controlling.
Document all of the requirements in the same way that we are gathering our requirements for our TELEDOCTOR project by defining goals.
After that, we're heading into the planning stage, where we'll figure out how to build our system using these specifications and a precise goal statement.

Next, as we move into the implementation phase, we must create a comprehensive project document that contains all of the information we have gathered, including the project's scope, overview, risk, and other details. Following this, we will create a quick prototype diagram for our project that shows how our system will ultimately look. Following this phase, we will integrate the database into our frontend and backend phases. Finally, we will train our CNN model by providing it with datasets and utilizing all available image processing techniques. At this point, patients will be able to select any doctor who appears on the appointment panel. They will designate any doctor by their choice and after appointing patients consulted to that doctor through our web application.

Additionally, we will test our system after implementation to make sure there are no bugs or errors.
Finally, in order to make our application easier for users to use, we will distribute it to our clients or users and upload it to the Play Store. Additionally, we plan to roll out our application at various hospitals that treat skin conditions.

MAP PROCESS GROUPS AND 10 KNOWLEDGE AREAS:

1. INITIATING PROCESS GROUP:

PROJECT INTEGRATION MANAGEMENT:

- Improve access to dermatology care for patients in rural and remote areas.
- Reduce the cost of dermatology care for patients in rural and remote areas.
- Improve the accuracy of skin disease diagnosis for patients in rural and remote areas.

PROJECT STAKEHOLDER MANAGEMENT:

- Supervisor.
- Faculty members who evaluate the project.
- Patients suffering from skin diseases.
- Dermatologists (skin specialist doctors).

2. PLANNING PROCESS GROUP:

PROJECT INTEGRATION MANAGEMENT:

- Firstly, make a proper about project.

PROJECT SCOPE MANAGEMENT:

- Developing a both mobile and computer-based skin disease detection system with a doctor-patient interaction module, including a user-friendly interface.

PROJECT TIME MANAGEMENT:

- Fixed time 1 year manages in 4 milestones.

PROJECT SCHEDULE MANAGEMENT:

- The process of managing a project's schedule includes identifying the tasks, placing them in a certain order, estimating their durations, creating a timetable, keeping an eye on the work, handling modifications, keeping stakeholders informed, allowing for unforeseen circumstances, and routinely evaluating and modifying the calendar.

PROJECT COST MANAGEMENT:

- Estimating, planning, monitoring, and regulating project costs are all part of cost management, which makes sure that the project is finished within the allotted funds and resources.

PROJECT QUALITY MANAGEMENT:

- It entails organizing, carrying out, and monitoring procedures to guarantee that the project fulfils the predetermined goals and quality standards.

PROJECT HUMAN RESOURCE MANAGEMENT:

- Its main objective is to manage the project team in an efficient manner. This includes training, and supervising project team members as well as their roles, duties.

PROJECT COMMUNICATION MANAGEMENT:

- Plan communication channel “WhatsApp” to communicate with supervisor, doctors and team members.

PROJECT RISK MANAGEMENT:

- Identify risks related to the application of the TELEDOCTOR system, evaluate their likelihood and effect, and create plans for risk mitigation.

PROJECT PROCUREMENT MANAGEMENT:

- Choosing hardware, software, and resources needed for the TELEDOCTOR system.

PROJECT STAKEHOLDER MANAGEMENT:

- Understand the interests of stakeholders and develop strategies to engage and manage their expectations throughout the project lifecycle.

3. EXECUTION PROCESS GROUP:

PROJECT INTEGRATION:

- Implement the project plan to create a system for detecting skin diseases and to improve communication between dermatologists and patients.

PROJECT SCOPE:

- Actively work on developing and implementing the skin disease detection system as outlined in the project scope.

PROJECT TIME:

- Ensuring timely completion of tasks according to plan.

PROJECT SCHEDULE:

- Ensuring follow schedule for implementing work according to plan.

PROJECT COST:

- Monitor and control project expenses, staying within the budget constraints.

PROJECT QUALITY:

- Follow the defined quality standards during the development and implementation phases.

PROJECT HUMAN RESOURCE:

- Provide support and development opportunities for the project team.

PROJECT COMMUNICATION:

- Effectively use communication channel during the execution of project.

PROJECT RISK:

- Address and mitigate risks as they arise during the development and implementation of the system.

PROJECT PROCUREMENT:

- Ensure to manage resources according to plan.

PROJECT STAKEHOLDER:

- Continue engaging with stakeholders to gather feedback and ensure their expectations are met during the execution phase.

4. MONITORING AND CONTROL PROCESS GROUP:

PROJECT INTEGRATION:

- Regularly monitor the progress of the TELEDOCTOR (SKIN) project.

PROJECT SCOPE:

- Ensure that the project stays within the defined scope and make adjustments as necessary.

PROJECT TIME:

- Adjust the project schedule as needed to maintain timelines.

PROJECT SCHEDULE:

- Ensure to maintain the plan schedule to complete work on time.

PROJECT COST:

- Adjust budget as required.

PROJECT QUALITY:

- Monitor and ensure that the quality standards are consistently met.

PROJECT HUMAN RESOURCE:

- Evaluate and address any performance issues within the project team.

PROJECT COMMUNICATION:

- Ensure that the communication plan is followed and adjust as needed.

PROJECT RISK:

- Continuously assess and address risks to minimize their impact on project objectives.

PROJECT PROCUREMENT:

- Manage the procurement process, ensuring that resources are obtained as planned.

PROJECT STAKEHOLDER:

- Keep stakeholders informed and engaged throughout the project.

5. CLOSING PROCESS GROUP:

PROJECT INTEGRATION:

- Document project outcomes and lessons learned.
- Obtain project acceptance and officially close the TELEDOCTOR (SKIN) project.

PROJECT PROCUREMENT:

- Make sure that every purchase is completed and that all resources are properly recorded.