

A support process of telemedicine applications that integrates a chatbot

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Concept

- A support process that includes service request and incident management helps telemedicine to prevent problems, to identify rapidly the causes of problems when they occur and to help in remediating the issues.
- To allow faster support and help from the system to the patients in an automated and user-friendly approach, the service request and incident management process should integrate a chatbot.

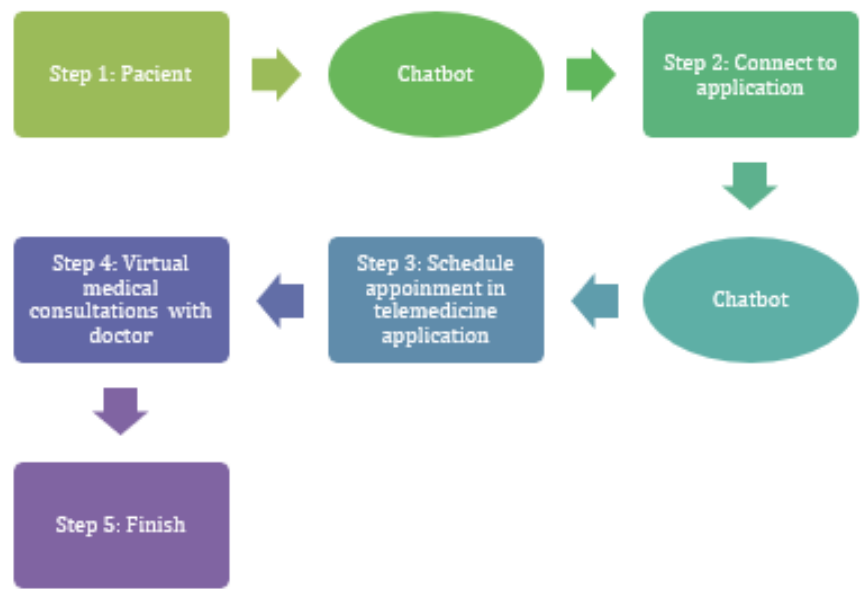
Objectives

- Development of the high-quality process that manage the IT incidents and service requests.
- Integration of a chatbot that can support the patients during any IT incident and service request and to help a patient to contact a doctor faster.
- The chatbot integrates different customizable and adaptive features.
- The chatbot can interact with users through text and voice interactions

Telemedicine Applications Workflow



Chatbot Integration



Chatbot characteristics identified at telemedicine applications

Characteristics	MDLive	Lemonaid	Regina Maria	Telios Care
Chatbot is integrated in the support process	Yes	No	Yes	No
Chatbot support to schedule/reschedule/cancel a consultation	Yes	No	Yes	No
Chatbot voice input	No	No	No	No
Chatbot written input	Yes	No	Yes	No
Chatbot has customizable features (example: changing the font of the text and the size of the text)	No	No	No	No
Chatbot to resolve complex user requests	No	No	No	No
Chatbot with adaptive features (example: if the user is blind, the chatbot will disable the visual outputs)	No	No	No	No

Chatbot evaluation (for speech and text commands)

- A group of 20 users evaluated the chatbot using speech and text interactions.
- Each user, tested 35 commands once using speech interactions and once using text interactions (using the Romanian language).
- A set of 1400 interactions was collected (700 interactions for each type).
- The users considered the presence of the chatbot very useful, and they considered that it facilitates a lot the support process and makes it clearer.