Patient-Centric Mobile App solution for Cancer Patients

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Why patient centric app?
Objective

to design a mobile app for cancer patients to manage their stressful daily routine

investigate technology for secure and patient owned data
Preliminary survey with 25 respondents

Survey selection was restricted to adults who

- were undergoing cancer treatment
- had undergone cancer treatment
- were caring for someone undergoing treatment
- had cared for someone undergoing treatment
Interview with
a patient
a caregiver and
a psychologist
Results

Have you ever used a smartphone app to support your cancer journey

Yes: 17%
No: 83%

Would you feel comfortable using an app to manage your medical appointments and treatment schedules and contact details?

Yes: 92%
No: 8%
### Themes and sub-themes

<table>
<thead>
<tr>
<th>Themes and sub-themes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-functional requirements</td>
<td>Requirements that can be used to judge the operations of the app rather than specific behaviour.</td>
</tr>
<tr>
<td>Functional requirements (Reminders, record keeping, wellbeing and add-on function)</td>
<td>Requirements that define the function or behaviour of the app. These requirements are divided into four subsets based on the nature of the function (Reminders, record keeping, wellbeing and add-on functions).</td>
</tr>
</tbody>
</table>
34 major functionalities are identified.
# Implemented functionalities

<table>
<thead>
<tr>
<th>Codes (functionalities)</th>
<th>Theme and sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everything in one place and easily accessible</td>
<td>Non-functional requirement</td>
</tr>
<tr>
<td>Reminder for medication and appointments</td>
<td>Functional requirements - Reminders</td>
</tr>
<tr>
<td>Appointments, medicines, mood tracking, liquid intake</td>
<td>Functional requirements - Record keeping</td>
</tr>
<tr>
<td>Lists, notes, links</td>
<td>Functional requirements - Add-on function</td>
</tr>
</tbody>
</table>
GenieCanHelp App

http://www.geniecanhelpapp.com/
Designed to support and empower patients along their cancer journey, with emphasis on helping them stay organized.
Available for free on “Google Play Store” and “Apple App Store”, ready for user evaluation.
We require **volunteers** to use app for 2-3 months for **evaluation**. Their **feedback** will help us **improve**.
Source code for GenieCanHelp app is open source

https://github.com/CyberGenieSolutions
Secure and patient owned data using blockchain technology
E2E Cryptographically Protected Exchange Over Internet using Smart Contracts & Blockchain
Future Work
Add more features
Sleep tracker
Journal writing
Audio recordings
and many more…
Improve based on user evaluation
Implement patient owned and secure data using blockchain
THANK YOU!