



openSAP course Build Your Own SAP Fiori App in the Cloud – 2016 Edition

Develop Challenge Submission Structure of the Document

- Story
- Persona (screenshot and full-text)
- User Experience Journey (screenshot)
- Point of View
- App screenshots

Story

CONTEXT

Every morning, the nurses of The HealthCare Company start their tour of patient visits. The HealthCare Company employs over 4000 nurses country-wide who visit thousands of patients daily.

Health care at home is the next important service offering after hospitalization. It enables the patient to remain in the private environment of residing home and to still take full advantage of medical care and follow-up known in hospitals.

The main activities during patient visits include taking care of the personal hygiene of the patient, examination (blood pressure), drug administration, wound care, carrying out post surgical activities the way these take place at a hospital. In some cases, medical tools are in place to facilitate lifting a patient in and out of bed.

Sometimes overlooked, but most important is the Human Factor in the sense that usually for the patient this is a moment of conversation which is highly appreciated. For the nurse, this is the moment to observe the mental condition beside the physical condition of the patient. Modifications in both physical and mental condition are reported to the patient's affiliated doctor(s) in order to adapt the pattern in drug administration accordingly, if required.

Last but not least, during the visit the necessary data regarding this visit needs to be collected and registered into the Information System, on-the-go. This administrative part is not only imposed by legal regulation, the accuracy and completeness of the data is the only guarantee for an optimal follow-up of the patient.

In particular, for this App, it will become apparent that there are two categories of data. The first category has directly to do with the daily registration of the patient's condition. Another category is dedicated to the Planning and Execution of the daily activities of each of the nurses. On the one hand, accuracy will result in valuable insight in the progress of the patient's condition; on the other hand, optimized planning will result in care administered on-time which creates value for the patient in terms of reliability as well as for the company in terms of cost.

SEGMENTATION

This App is intended for the area of Service Management, in processes involving Planning of service on-site and resource allocation, together with the monitoring of the follow-up of these activities to close the execution loop.

TARGETING

In particular, this planning and execution pattern will serve the Health Care Industry in Planning, execution and follow-up of medical care activities on patients located at their residence or at a desired location (e.g. while on holiday).

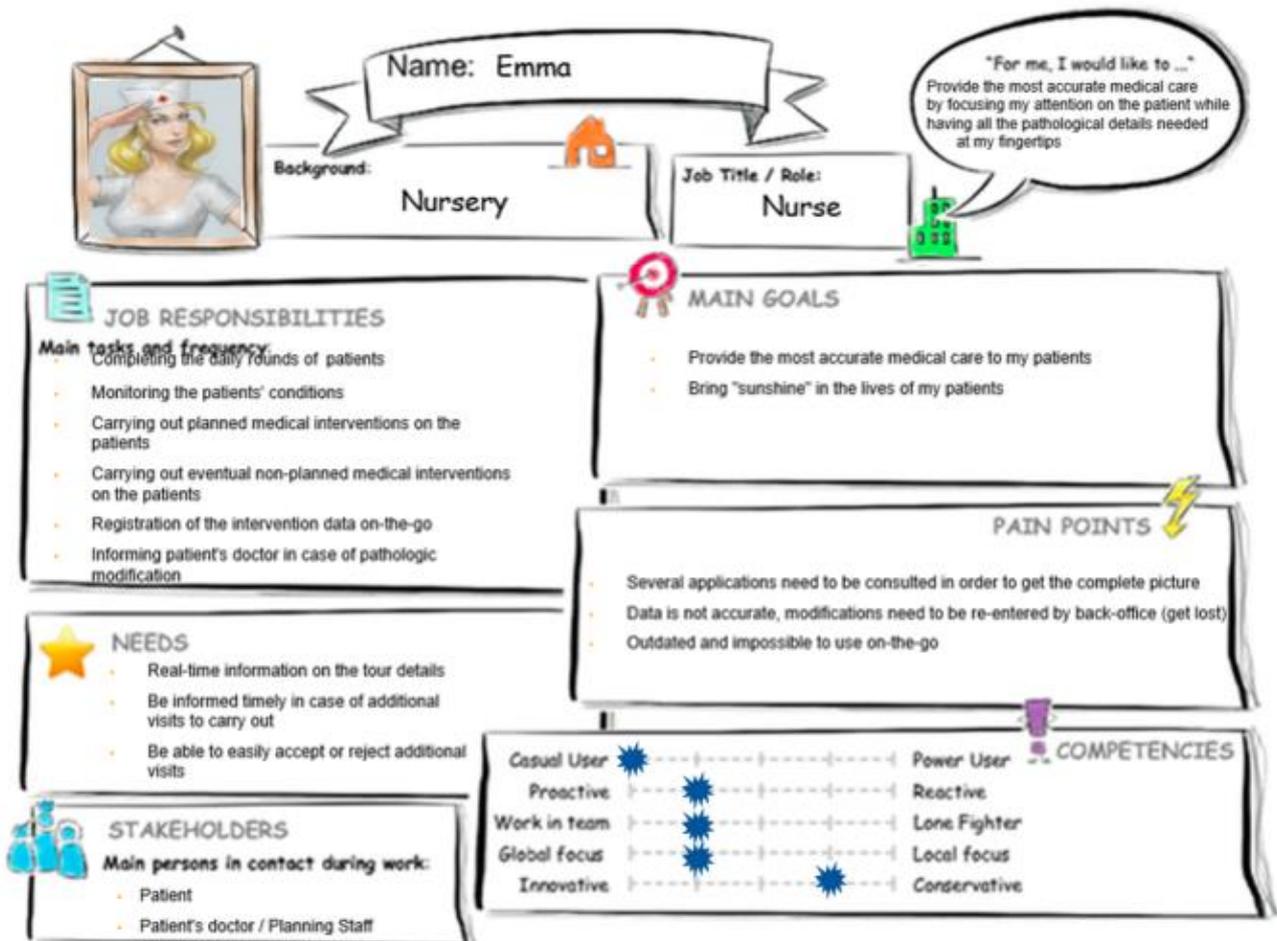
POSITIONING

Using the SAP HANA Cloud Platform and SAP Fiori UX, the nurses at The HealthCare Company will be equipped with a new Mobile Device running the new App for quick look-up of the daily tour data, to assess the patient data at a glance, and to register the activities carried out per patient in a brand new user experience.

Some important facts reveal that the profession of nurse is perceived as being a "Calling" by the nurse where the job satisfaction is almost entirely related to the interaction with the patient. The interaction with non-medical devices, even up to the handling of administrative paperwork is often perceived as necessary, but not the most exciting thing to do. Also, the execution of medical care on-premise reveals that most of the time the employee feels as disconnected from the company. Hence, the App should feel as a work companion, providing assistance in the tour data, easy to register data, and feel as being a communication channel with the company.

Persona

Our main Persona is the nurse who will use the App during the daily patient visits. The figure below sketches the first observations drawn from a first interview with Emma. If the content is not quite readable in this document, be informed that it is only intended to get a visual feeling on what has been jotted down and aggregated. The sketch has been handed out to Emma for review.



Review has revealed that the peer colleagues doing their rounds in the same area as Emma are not taken into account in our first Persona sketch. Below is the updated Persona, after review. Emma feels happy with this version (in full-text):

Name:

Emma

“For me, I would to...”:

Provide the most accurate medical care by focusing my attention on the patient while having all the pathological details needed at my fingertips

Background:

Nursery

Job Title / Role:

Nurse

Job Responsibilities (Main tasks and frequency):

- Completing the daily rounds of patients
- Monitoring the patients' conditions
- Carrying out planned medical interventions on the patients
- Carrying out eventual non-planned medical interventions on the patients
- Registration of the intervention data on-the-go
- Informing patient's doctor in case of pathologic modification

Main Goals:

- Provide the most accurate medical care to my patients
- Bring "sunshine" into the lives of my patients

Needs:

- Real-time information on the tour details
- Be notified timely in case of additional visits to carry out
- Be able to easily accept or reject additional visits

Pain Points:

- Several applications need to be consulted in order to get the complete picture
- Data is not accurate, modifications need to be re-entered by back-office (sometimes the re-entry of data is overlooked, so the data gets out-of-sync with reality)
- Outdated and impossible to use on-the-go

Stakeholders:

- Patient
- Patient's doctor / Planning Staff / Peer nurses

Competencies:

Highly competent, positive attitude when it comes to job related activities. IT stuff is not really a "turn-on".

User Experience Journey

Current User Experience Journey

Duration of the Journey: 1 Tour

Mindset

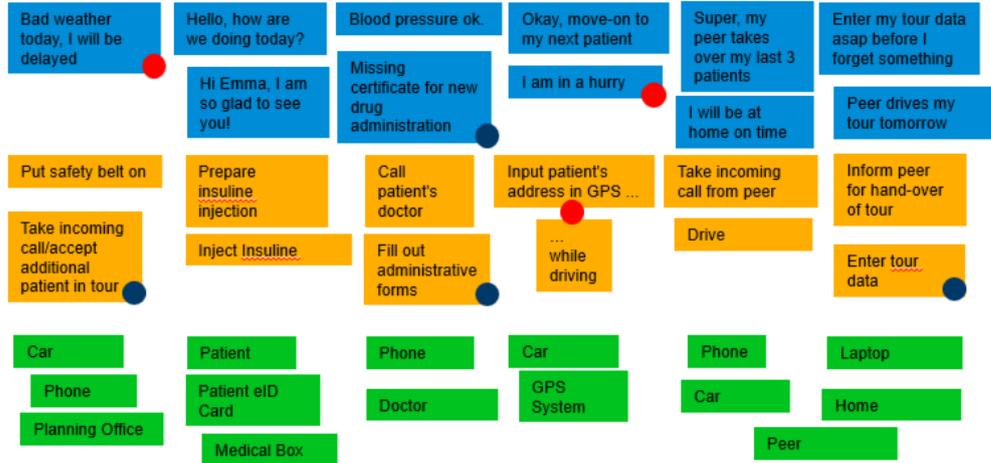
What is on the Persona's mind while taking the actions of their journey? How do they feel each step of the journey?

Actions

What actions and activities does the Persona take while going thru the journey to achieve their goal?

Touch points

What touch points does the Persona have? (Tools, channels, devices, conversations, and so on.)



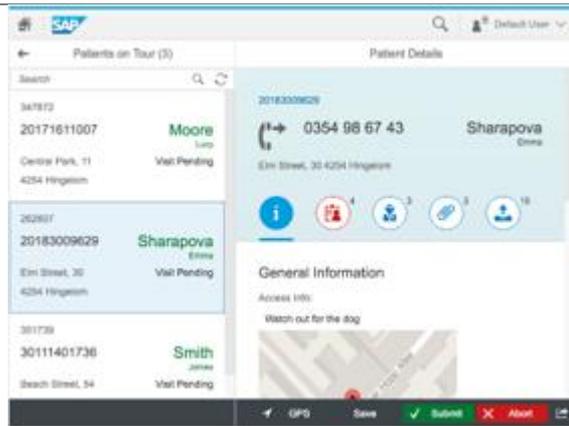
Point of View

Emma, the nurse, needs an easy way to quickly lookup and enter patient data on the go so she can concentrate on her main job responsibilities: Taking care of her patients. According to Emma: "I am doing my job in full-remote mode. You see, the only contact with the planning office and my peers is via mail or phone. So I need an App that is a companion, a co-pilot informing me about incoming notifications and a driving assistant".

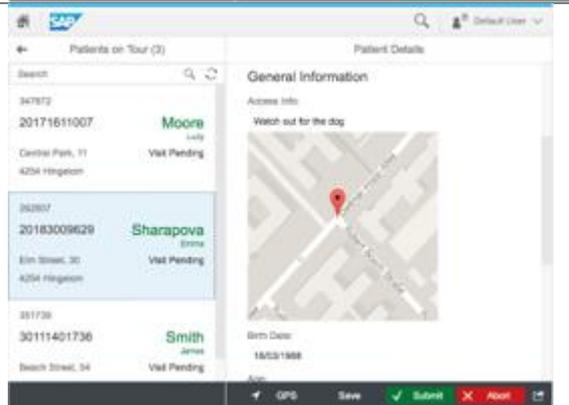
App Screenshots

The App starts with a Master/Detail view on tablet or with the Master View on smartphone.

The Master View lists the different patients to visit on the tour. A Status field permits to verify whether a patient visit is "pending", "Visited", or "Rejected".

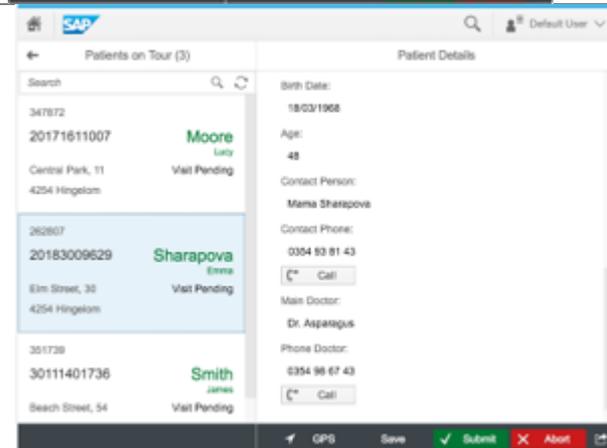
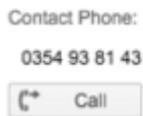


Important is that the nurse does not lose any time with details like not knowing where the patient lives. The geolocation is displayed and by pressing the GPS button, the App starts GPS navigation (e.g. Offline Maps App) to this location from the current location.



Scrolling down the Detail page, contact details of the patient are displayed, such as family contact and main affiliated doctor.

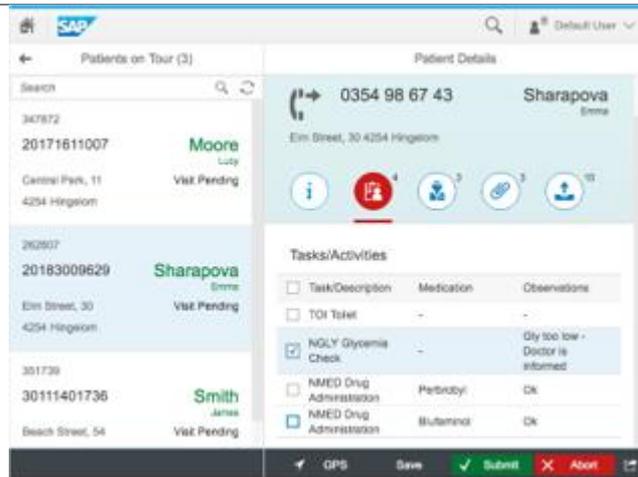
Note that in case the nurse needs to get in touch with these contacts, the phone numbers can be dialed immediately via the "Call" buttons:



On arrival at the patient's location, the "Tasks" tab indicates the number of tasks to carry out. The icon is highlighted in "red" to indicate that there is work to do in the worklist.

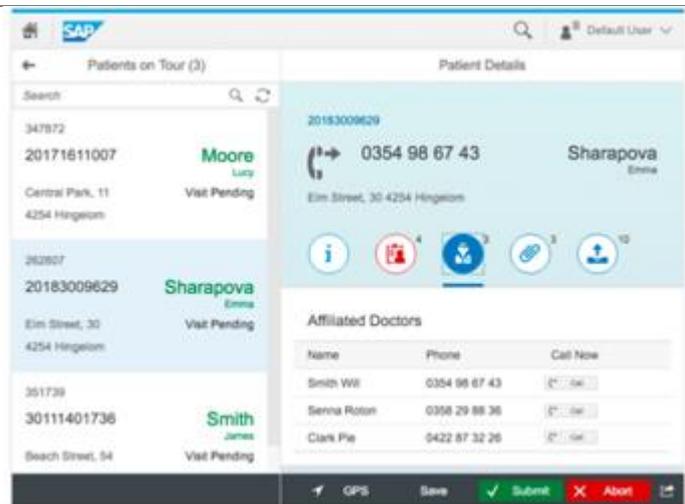
By checking the check boxes, the nurse indicates that the work is done. When all work is done, the icon turns to "green".

Intermediate work can be saved at any time by pressing the "Save" button (next to the GPS button).



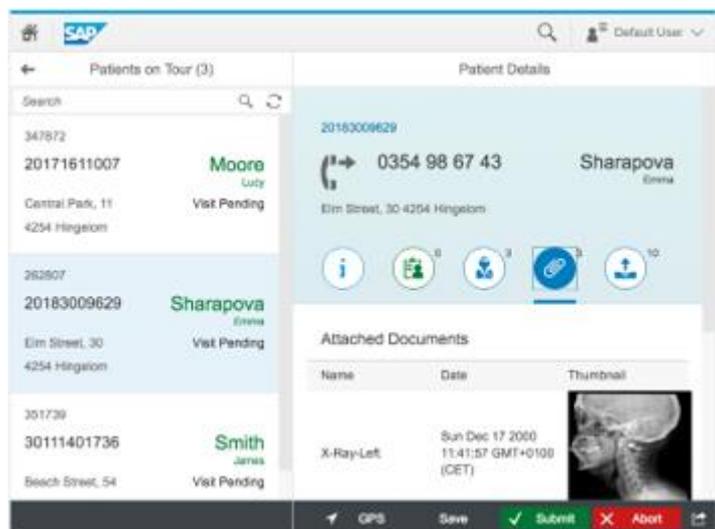
The next tab provides an overview of all doctors that provide treatment to the patient.

Here again, in case there is need to get in touch with these contacts, the phone number can be dialed automatically using the "Call" buttons:



The "Attachments" tab contains documentation on the patient, such as x-ray photos, or doctor certificates ...

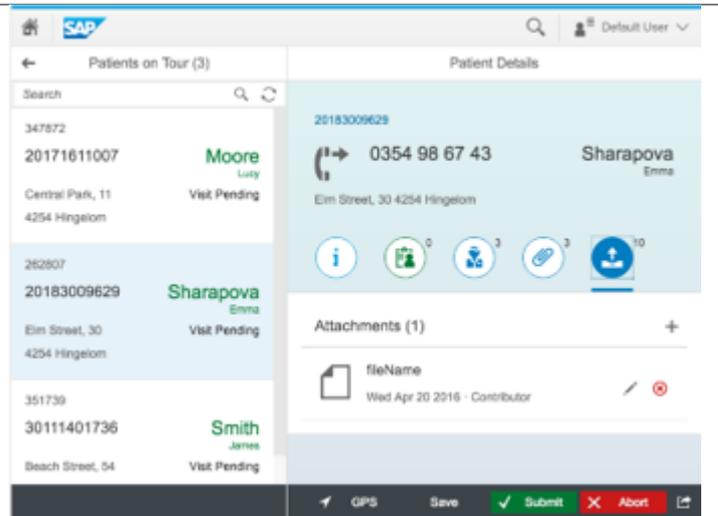
Name	Date	Thumbnail
X-Ray-Left	Sun Dec 17 2000 11:41:57 GMT+0100 (CET)	
X-Ray-Right	Tue Nov 14 2000 11:41:57 GMT+0100 (CET)	
Doctor Certificate	Fri May 03 2013 11:41:57 GMT+0200 (CEST)	



Finally, the "Upload" tab enables the nurse to take camera pictures and/or to upload any other electronic documentation to the back-office.

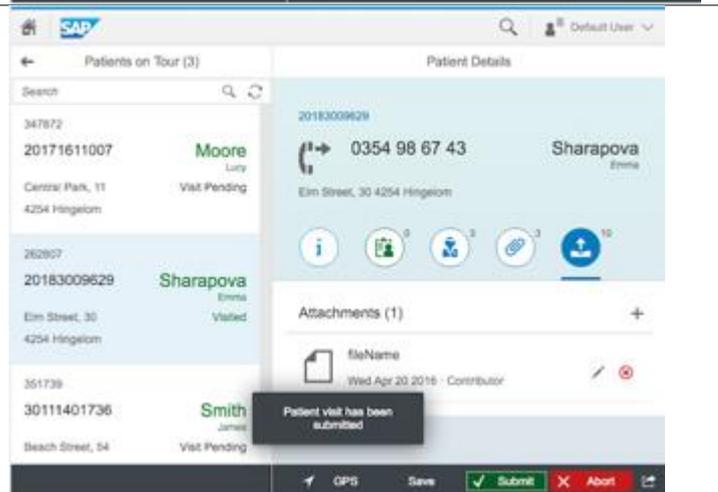
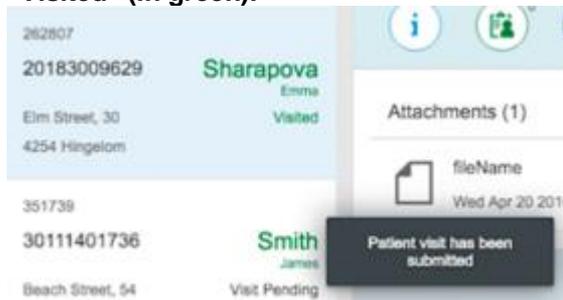
The control used is the standard one for uploading collections of items.

Hit the "+" sign to add a file from the File System (e.g. after having taken a picture).

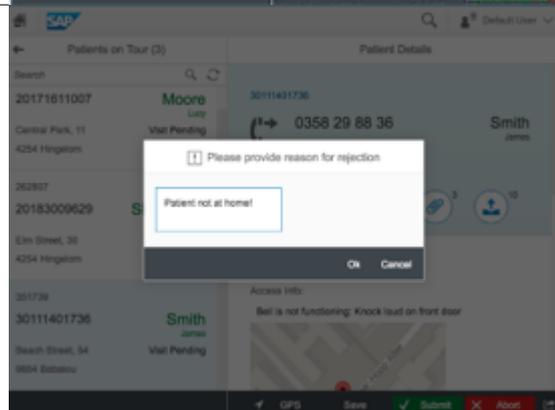


When the worklist is finished at the patient's location, the nurse hits the "Submit" button if everything went well.

Note that the patient status changes to "Visited" (in green):



In case the worklist could not be completed, the nurse presses the "Abort" button and gets the opportunity to explain why activities could not be carried out.



The nurse is now ready to drive to the next patient!

Hope you enjoyed the Use Case. Hopefully this App indeed reduces the administrative overhead for the nurses and that this App is really a "companion" along the journey.