

n°	Context	Features
1	Mute, Desktop, Positioning, LightMode, No Connection	Store message, Light, Off, Display, ComplexLayout
2	Mute, Desktop, LightMode, NoConnection, DataSaver, Bluetooth	Store message, Light, Off, Display, ComplexLayout, Restricted download
3	Mute, Smartphone, LightMode, NoConnection, Bluetooth, Driving	Store message, Light, Off, Display, SimpleLayout
4	Sound, DarkMode, NoConnection, Driving, DataSaver, Smartphone	Store message, On, Display, Restricted download Dark
5	DoNotDisturb, DarkMode, NoConnection, Smartphone, Positioning, Low	Store message, Off, Restricted download
6	Sound, LightMode, Wifi, Smartphone, Low	SendMessage, On, Display, Light, Receive, Position
7	DoNotDisturb, LightMode, Wifi, High	SendMessage, Off, Light, Receive, File, Picture
8	Sound, LightMode, Wifi, Desktop, Bluetooth	SendMessage, On, Display, Light, Receive, ComplexLayout
9	Sound, LightMode, Cellular, Smartphone, Bluetooth, Driving, Positioning, DataSaver	SendMessage, On, Display, Light, Receive, SimpleLayout, Predefined, Position, Restricted download

Table 1: Contexts and features changes throughout scenarios

1 Usage scenarios

- scenario 1
 - Anthony is using his desktop computer that is in light mode.
 - He mutes the notifications system.
 - He allows the positioning setting on his machine.
 - Unfortunately he has no internet connection so the messages he is going to send will be first stored before the device reconnects to the internet.
 - The light mode on his computer has activated the light mode on his smart messenger app.
 - Since his computer is in mute mode, the volume is off but it still displays the notifications.
 - The complex layout is displayed because he is on a desktop device.
- scenario 2
 - Anthony turn off the positionng setting but turn on the data saver and the bluetooth settings.
 - The data saver mode activates the restricted download setting.
- scenario 3
 - Anthony leaves his desktop computer and starts using his smartphone on which the data saver is off.
 - Since he's using a phone the complex layout cannot be displayed so it's the simple one that takes it place.
 - He takes his car and starts driving.
- scenario 4
 - Anthony switches his phone them into the dark mode which enable the dark mode on his smart messenger as well.

- Then he turns off the bluetooth.
 - He turns his phone in sound mode and activates the data saver which enables the restricted download.
- scenario 5
 - Anthony turns off the data saver which disables the restricted download.
 - His phone's battery is now low which reactivates the restricted download.
 - He exits his car and starts a meeting and turn his phone into "Do not disturb" which turns off the volume and doesn't allow the display of the notifications that he may receive.
 - Then he activates the positioning setting.
- scenario 6
 - The meeting is over and Anthony enable the sound mode that will allow the display of the notifications with the sound associated.
 - He connects his phone on the wifi and the messages that were stored in his phone are now send.
 - He turn his device into the light mode which will again turn his smart app into light mode.
 - Since the wifi is on, he can send and receive messages.
 - With an internet connection and the positioning setting still on, his current position is available to his device.
- scenario 7
 - Anthony deactivates the positiong option, his device cannot know his current position anymore.
 - His phone has charged several minutes and the battery is high again.
 - The he put his phone on "Do not disturb" so the display and sound of the notifications are turned off.
 - With the wifi connection and a high battery he is now able to send pictures or files via the smart messenger app.
- scenario 8
 - Anthony put his phone away and starts using his desktop computer again, so the complex layout is displayed.
 - On his computer, the sound mode is enable so the notifications and their sound are enabled.
 - On his computer the bluetooth is activated.
- scenario 9
 - Anthony quits the computer for his phone and starts driving.
 - He cannot acces to the wifi anymore so he turns on the cellular setting, as well as the positioning setting which enables his phone to know his current location.
 - He activates the data saver on his phone which enables the restricted download.
 - Since he is driving wiht the bluetooth and cellular setting activated, he can now send predefined messages.

2 Analysing usage scenarios

2.1 Error detected

When the user is on a desktop computer we considered that the battery context was irrelevant but we should have considered the battery as high. Because in this case it is not clear that the user is allow to use the File and Picture features.

2.2 Improvement

In those scenarios the user changes the theme of his device very often, which is not a typical behaviour. Instead of doing it manually, we could imagine that the dark mode would automatically turn on when the the user's surrounding becomes darker. This way the screen wouldn't be too bright for the user's eyes.

3 Lexicon

Data Saver Mode that restricts downloads

Restricted Download Restricts download such as automatic updates, automatic pictures/files downloads, ...

Nickname Give some of your contacts a nickname that she/he can see. Allow the users to personalise their conversations and add some fun to the app

Display Show the notification

4 Updated Mapping

