IMAGINE IOT
PROTOTYPE CHALLENGE

SMART WATCH - TIME TO SAVE THE WORLD!
Natural disasters are a worldwide problem. While some countries, like Japan, have developed various techniques and devices to handle such an event, others, like Romania, are novices in this field.

For example, on 24 September 2016, at 2:11 am, an earthquake measuring 5.3 on Richter scale took place in Vrancea which caused numerous emergency calls. Most of the people called just to ask what to do in that emergency situation, the event ending without victims.

Although some natural disasters can be predicted, none can be stopped. The aim of every country should be to create personalized solutions in order to save as many lives as possible in a short period of time, on the assumption that the communication system is not working and the emergency units are limited.
**Persona**

**TINA**

Citizen

“Life is short and beautiful and should be lived to the fullest.”

**About**

- 35, married, mother of 2 children
- I am a very active person who lives in a big city
- I like user-friendly devices, that are easy to use
- As an accounting I have a medium income

**Responsibilities**

- I drive and take children from school
- I do householding activities, including the shopping
- At the company I am one of the responsible persons in emergency situations

**Main Goals**

- I want to be prepared to successfully face a crisis situation and to react as best as possible
- I am caring person and I want to give my family the best protection, even when I am not around

**Needs**

- I need an accessible and easy solution to help me in a crisis situation or natural disaster
- I need the solution to not be very expensive as I have a moderate income
- I need a suitable solution for me and my family (children, husband, parents)
- I need a solution easy to use in everyday activities and in various locations

**Pain Points**

- I don’t want the solution to affect my daily activities (like a surviving backpack)
- I don’t want to invest a lot of money
- My country should also be involved in this, as natural disasters are a worldwide problem
Point of View

As a Citizen

I need a way that helps me in case of crisis situations or natural disasters (which is accessible and easy to use)

so that I can be prepared to better react to such events (reduce panic).

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## UX Journey

### User Experience Journey – dealing with an earthquake

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>FINISHING THE LAST TASKS OF THE DAY</th>
<th>STARTING TO FEEL THE EARTHQUAKE</th>
<th>BEGIN TO PANIC AS THE EARTHQUAKE CONTINUES</th>
<th>EARTHQUAKE STOPS. EVALUATE SITUATION</th>
<th>REALIZE THAT YOU ARE OK, BUT SEVERAL COLLEAGUES ARE HURT</th>
<th>REALIZE THAT THE COMMUNICATION SYSTEM IS NOT WORKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINDSET</td>
<td>“Time to go home”</td>
<td>“Oh my God, what is happening?”</td>
<td>“Will I survive?”</td>
<td>“Finally, it’s over”</td>
<td>“I need to call an ambulance. Where’s my phone?”</td>
<td>“Are we going to survive?”</td>
</tr>
<tr>
<td></td>
<td>“First, I need to take the kids from school”</td>
<td></td>
<td>“My kids, my husband, my family!”</td>
<td>“I need to calm down and evaluate the situation”</td>
<td>“I can’t find the phone in this mess?”</td>
<td>“Is my family ok?” “Who is going to help us if they don’t know?”</td>
</tr>
<tr>
<td>FEELING</td>
<td>😊</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOUCH POINTS</td>
<td>• Clock</td>
<td>• Desk</td>
<td>• Mobile</td>
<td>• Colleagues in the room</td>
<td>• Mobile</td>
<td>• First aid kit</td>
</tr>
<tr>
<td></td>
<td>• Doorjamb</td>
<td></td>
<td></td>
<td>• Mobile</td>
<td>• Company phone</td>
<td>• Colleagues in the room</td>
</tr>
<tr>
<td></td>
<td>• Mobile</td>
<td></td>
<td></td>
<td>• Mobile</td>
<td>• Other devices</td>
<td></td>
</tr>
</tbody>
</table>
Prototype

The prototype contains 2 parts:
- a SMART watch for every citizen
- an integrated application that collects data, analyze them and optimize the resources available for the emergency units;

Part 1: The Smart Watch has basic functions in a normal day.

- But with a simple switch it can become a life saver.
- Now each button corresponds to a unit that can be called in emergency situations: ambulance, firefighters, police or Smurd (emergency rescue service based in Romania)
- The adjustment button turns into an audio-guide with life saving instructions
- When a button is pressed a digital signal is send through a COSPAS-SARSAT satellite registering the location and the need of the user.
- The watch has an unique ID so in order to discourage false alarms (when the clock is bought a personalized form is filled and the user is registered in database system).
Part 2: The Smart Emergency Unit application is available here:

https://standard.build.me/api/projects/cd424ab6abf5afac0cc3ba63/prototype/snapshot/latest/index.html#/14764542537352409_S0

The application contains:
- An overview screen – this can be used in order to identify major incidents and make decisions at city level (for example: 15 ambulance calls, and 2 fire calls come from the area of the city than send 5 ambulances and 1 fire truck to deal with all calls)
- A detailed screen - for each emergency unit; it contains 3 tabs:
  - incoming calls
  - in progress calls
  - emergency units reports

Other screens can be added to the application:
- Overview screen for incidents that can contains details of every called (who made the call, how quick a unit was send, how much did it took, what is the current status of the call)
- Report screens for every emergency unit (how many call were resolved, how effective were the calls resolved, what is the status of current call)