

Ebook reader application SRS

Requirements Specification

Index

| | | | |
|---|---|--------------------------------|---|
| 1 Scope..... | 1 | 3.3.1 Module elements | 3 |
| 1.1 Product lifecycle..... | 1 | 3.3.2 Layout templates..... | 4 |
| 2 Users..... | 1 | 4 Content..... | 4 |
| 3 User Experience and Interface..... | 1 | 5 Protection requirements..... | 4 |
| 3.1 Start and Topic Selection..... | 2 | 5.1 Activation..... | 4 |
| 3.2 Module Selection (if too expensive, it is ok to just show a list)..... | 2 | 5.2 Content protection..... | 4 |
| 3.3 Modules..... | 3 | 6 Appendix – Hierarchies | 4 |

1 Scope

This software is an ebook application for iOS and Android. It is an ebook but not distributed as a book (epub or mobi): instead, the content is embedded in an app distributed as free app on the market.

Smoothness of user experience, and fast execution are the key differentiators; protection of the content is the main constraint.

The coding must be made with two lifecycle targets:

- an easy update of the contents without any coding
- fast execution in order to have a good user experience.

The tablet is not assumed to be connected to the internet after installation; all the content must be stored in the app itself.

1.1 Product lifecycle

The producer (not the programmer) prepares the images, videos, texts and formatting for the back office; then code is compiled with this content, and everything is loaded/updated on the Apple Store and Google Play.

In order to see the content (Or the paid part of it), the reader must insert a code. TBD

2 Users

There is no user administration: the user is the reader – and is unique, no other types are considered. All the other steps (content integration, compilation...) are to be considered pre-distribution.

3 User Experience and Interface

The software must work full screen, and must be able to adapt to different screen resolutions and sizes.

The first screen page can be personalized with the School logo; it is only an introductory image with no functionalities.

The screens presented in the following sections are in the order of the flow, meaning first the user selects the Topic (in a unique page presenting all the areas/chapters/topic list), then the Module, then is able to browse among the pages. The content of the pages is only text and images. The text on the left, the images on the right – if no images are available, the text must occupy the full screen. The 2 sections scroll down independently, meaning if the text is long, it can be scrolled without changing the view on the image side, and viceversa.

It must be possible to zoom in/out the text.

There is always a navigation bar, where it's possible to click on the previous hierarchical elements to go back in the selection.

3.1 Start and Topic Selection

There are currently 7 **MacroAreas**, each corresponding to a different color:

- grey: La strada, i veicoli e le persone
- green: La segnaletica stradale
- violet: Norme di comportamento
- yellow: Equipaggiamento dei veicoli
- orange: Documenti di circolazione e di guida
- blue: La sicurezza sulla strada e la prevenzione degli incidenti
- magenta: L'ambiente, la tecnica del veicoli, la correttezza di guida

| | |
|---|---|
| La strada, i veicoli, le persone | |
| La segnaletica stradale | Capitolo 2 2.1 Segnali di pericolo Capitolo 3 3.1 Segnali di prescrizione – Divieto Capitolo 4 4.1 Segnali di prescrizione – Obbligo Capitolo 5 5.1 Segnali di prescrizione – Precedenza Capitolo 6 6.1 Segnaletica orizzontale |
| Norme di comportamento | |
| Equipaggiamento dei veicoli | Capitolo 7 7.1 Segnalazioni semaforiche 7.2 Segnalazioni degli agenti del traffico |
| Documenti di circolazione e di guida | Capitolo 8 8.1 Segnali di indicazione |
| La sicurezza sulla strada e la prevenzione degli incidenti | Capitolo 9 9.1 Segnali complementari 9.2 Segnali temporanei e di cantiere |
| L'ambiente, la tecnica del veicolo, la correttezza di guida | Capitolo 10 10.1 Pannelli integrativi dei segnali |

Nice to have: a small indicator flagging the last topic visualized, to help the user recalling what was done during the last lecture.

3.2 Module Selection (*if too expensive, it is ok to just show a list*)

Clicking on the topic, a selection screen appears, presenting all the icons/buttons of the Modules of the selected Topic. These icons/buttons can be text only, or text + image, as in the two examples below.

13.1 Norme sulla circolazione dei veicoli – Posizione dei veicoli sulla carreggiata – Circolazione per file parallele

| | | | | |
|---|---------------------------------|-------------------------------|---|---|
| Generalità | Senso civico e buonsenso | Destra rigorosa | Circolazione su strade a due o tre carreggiate separate | Circolazione su strade a due o più corsie |
| Circolazione su strade con binari tranviari | Circolazione per file parallele | Incolonnamento predirezionale | | |

2.1 Segnali di pericolo

| | | | | |
|---|---|---|--|---|
| Generalità |  |  |  |  |
| Strada deformata n.1 | Dosso n. 2 | Cunetta n. 3 | Curva a destra n. 4 | |
|  |  |  |  |  |
| Curva a sinistra n. 5 | Doppia curva, la prima a destra n. 6 | Doppia curva, la prima a sinistra n. 7 | Passaggio a livello con barriere n. 8 | Passaggio a livello senza barriere n. 9 |

Clicking on the icon/button corresponding to a Module, a new interface is visualized .
Nice to have: a small flag highlighting which was the last visualized module.

3.3 Modules

3.3.1 Module elements

Warning: some modules may imply many screens. A forward and backward arrow must then appear, to allow the user showing all the content (and make him aware that the Module is not finished)

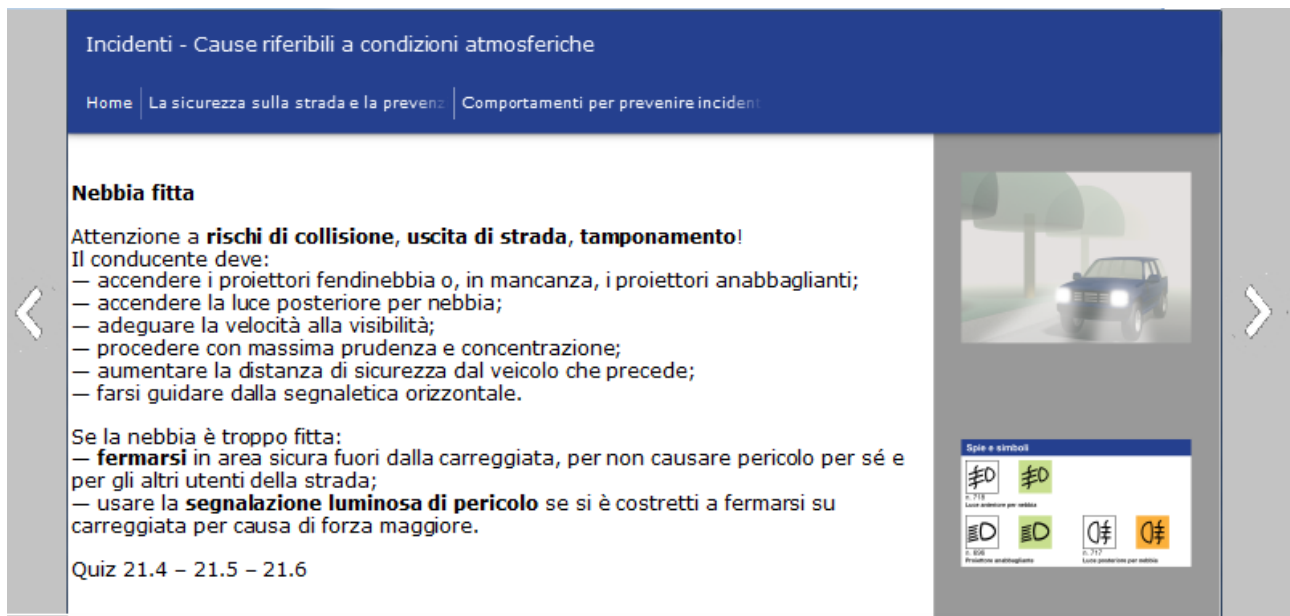
An indicator in the input file (the one which is loaded at compilation time) will tell the software whether to show the arrows or not.

The content is made of text (formatted) and images – the format of the content is TBD.

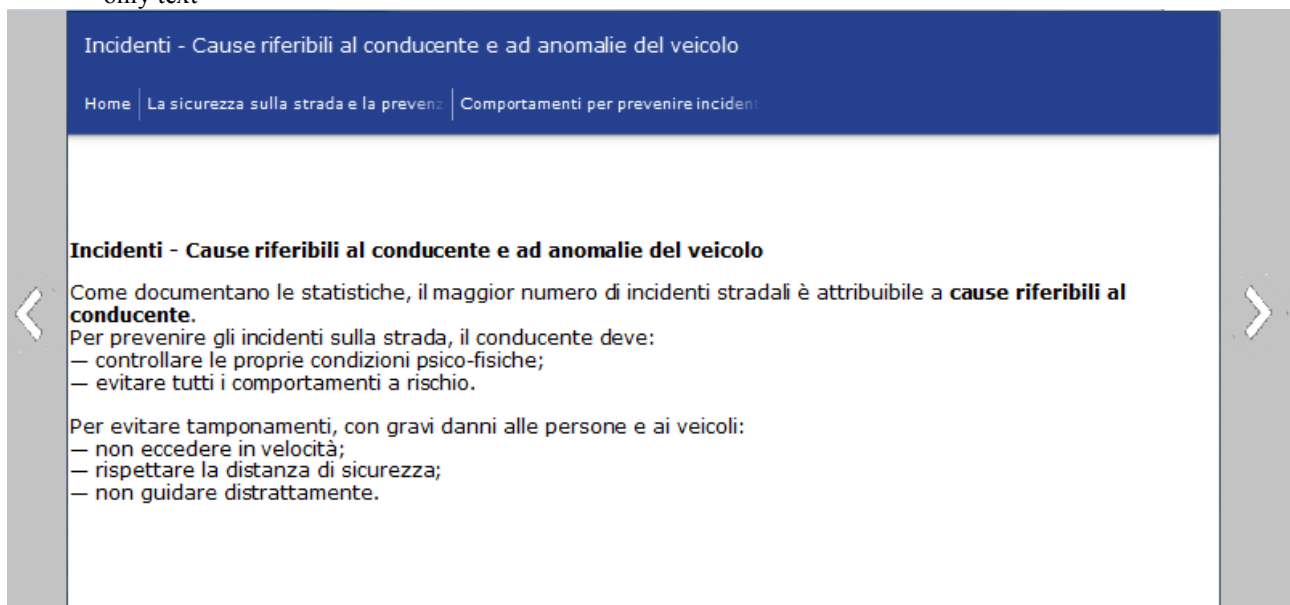
3.3.2 Layout templates

These are the templates

text + image(s)



only text



As it's shown in the appendix mockups, every template must include a **navigation bar** (the levels are always 1- Home < 2- MacroArea > 3- Chapter-Topic > 4 - Module)

The color of the bars must be the same as the MacroArea one.

4 Content

All the content must be loaded as input at compilation time; it must be stored externally wrt to the program, which must therefore be parametrized in order to be instantaneously regenerated/recompiled whenever the content is changed.

Preferred: input from openoffice.org (if it's possible to keep the fonts and/or the bolds/italics and/or the various sizes).

The content will be written in a structured way, a-la-LaTeX, defining the fields and their content, in a way that the compilation populates the templates and all the other fields without any further action.

The way of structuring the documents (and the tools to use) has to be defined according to the programmer's needs.

5 Protection requirements

5.1 Activation

The product is active when a code is inserted; at that moment, all the content is downloaded from the repository. The activation is valid for a determined period of time, after which a new activation code must be inserted. After the time is expired, the content is deleted automatically.

5.2 Content protection

The content (text, images) must be protected/cripted, so that it's impossible to extract them.

6 Appendix – Hierarchies

| | | | |
|-----------|---------|-------|--------|
| MacroArea | | | |
| | Chapter | | |
| | | Topic | |
| | | | Module |

There are 7 MacroAreas, 25 Chapters, 45 Topics and a number of modules.

The software must be independent on the number of any of these sets of elements.