**EZGas**

**0) BUSINESS MODEL**

FREE

**1) STAKEHOLDERS**

Driver

Gas station owner

**Developing team (NOT ACTOR, because developer; pattern)**

**Developing company CEO (NOT ACTOR, because developer; pattern)**

**Administrator (pattern)**

**Application store (pattern)**

Google map

Payment system (**if present payment, like IS**)

Immagine che contiene diagramma, linea, Diagramma, modello

Il contenuto generato dall'IA potrebbe non essere corretto.**2) CONTEXT DIAGRAM & INTERFACES**

**Context diagram:** inseriamo tutti gli **stakeholders** **tranne** gli sviluppatori, ovvero:

* **Developer team**
* **Developing company CEO**

**Interfaces**: tabella a 3 colonne:

* **Actor (tutti gli omini del context diagram)**
* **Physical interface** 
  + **DEVICE** se persona **fisica**
  + **INTERNET CONNECTION** se servizio **astratto**
* **Logical interface**
  + **GUI** se persona **fisica**
  + **API spec** se servizio **astratto**

|  |  |  |
| --- | --- | --- |
| **Actor** | **Physical Interface** | **Logical Interface** |
| Driver | Smartphone, PC | GUI |
| Gas station owner | PC | GUI |
| Google map | Internet connection | API spec |
| Administrator | Smartphone, PC | GUI |
| Application store | Internet connection | API spec |
| Payment system | Internet connection | API spec |

**3) FUNCTIONAL REQUIREMENTS (F)**

**1^** colonna 🡪 **ID F requirement**

* Mettere sempre **Authorization** **and** **authentication**

**2^** colonna 🡪 **Descrizione F requirement**

Ci possono essere **gerarchie** (Es. F1, F1.1, F1.2 ecc…)

You can use stories to clarify your ideas and define the functional requirements. You can use hierarchy to group functional requirements that are logically (not temporally) related.

|  |  |
| --- | --- |
| F1 | Authorization and authentication |
| F1.1 | Sign in (create account 🡪 username and password) |
| F1.2 | Log in |
| F1.3 | Log out |
| F1.3 | Change password |
|  |  |
|  |  |
| F2 | Searching for gas station |
| F2.1 | Filtering prices |
| F2.2 | Filtering location |
| F2.3 | Filtering quality of service |
|  |  |
|  |  |
| F3 | Register gas station |
| F3.1 | Set prices |
| F3.2 | Set discounts |
|  |  |
|  |  |
| F4 | Monitor Usage |
| F4.1 | Count users |
| F4.2 | Count transactions |
| F4.3 | Ban non-adapt user |
|  |  |
|  |  |
| F5 | Payment |
| F5.1 | Commit action if success |
| F5.2 | Rollback action if failure |
| F5.3 | Invoice |

**4) NON FUNCTIONAL REQUIREMENTS (NF)**

**1^** colonna 🡪 **NF requirement** (vedi teoria per capire quali sono)

**2^** colonna 🡪 **Descrizione NF requirement**

|  |  |
| --- | --- |
| USABILITY | Application is simple and readable |
| EFFICIENCY | Response time for F2.1 < 1 ms |
| RELIABILITY | The application is resistant to big number of users (< 15k per time) |
| MANTAINABILITY | Application bug fixes done in 5 hours on average |
| PORTABILITY | Application can be used on PC or smartphone |
| SECURITY | Password requirements for sign in |
| SAFETY | Sending email to confirm password change and location of access |

**5) TABLE OF RIGHTS**

* **Actor** 🡪 COLONNE: stessi degli interfaces e context diagram (quindi no sviluppatori)
* **FR** 🡪 RIGHE : mettere solo i F requirements primari (non i sottopunti)

Mettere solo YES o NO in base a se l’attore partecipa al functional requirement

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Gas station owner | driver | admin | Application store | Payment system | Google map |
| FR1 | YES | YES | NO | NO | NO | NO |
| FR2 | NO | YES | NO | NO | NO | YES |
| FR3 | YES | NO | NO | NO | NO | YES |
| FR4 | YES | NO | YES | NO | NO | NO |
| FR5 | YES | YES | NO | NO | YES | NO |

**RVC**

0 business model

1 Stakeholders

2 Context diagram and interfaces

3 Functional requirements

You can use stories to clarify your ideas and define the functional requirements. You can use hierarchy to group functional requirements that are logically (not temporally) related.

|  |  |
| --- | --- |
| F1 |  |
| F1.1 |  |
| F1.2 |  |
| F1.2.1 |  |
|  |  |
|  |  |
|  |  |
| F2 |  |
|  |  |
|  |  |
| F3 |  |
|  |  |
|  |  |
|  |  |
| F4 |  |
| F4.1 |  |
| F4.2 |  |
| F4.3 |  |
| F4.4 |  |
| F5 |  |
|  |  |
|  |  |
|  |  |

4 Non functional requirements

5 table of rights

|  |  |  |  |
| --- | --- | --- | --- |
| actor | Gas station owner | driver | admin |
| F1 write price of fuel for a gas station | yes | no |  |
| F2 read price of fuel |  |  |  |
| F3 create account | no | no | yes |