**SOFTWARE REQUIREMENT ANALYSIS PROCESS.**

This part will be charged to the requirement analysis team, which will be composed of specialised workers in software engineering, and once the requirement analysis is finished the team should send it to the Software design team.

* Art1- Once a document with a textual description of the software is received, the team should divide it into sections and work separately on them.
* Art2- Once the first iteration on the document is made a full review should be made obtaining at least the functional requirements.
* Art3- Every functional requirement should be written in a .docx taken into account the name policies.
  + Art3.1- The name of the functional requirements should follow the next rules:
    - The first two letter should be FR (functional requirement)
    - After establishing that it is a functional requirement a hyphen splitting the FR and the next property.
    - Then we need FR-P000 corresponding P000 to the Project identificator
    - After that another hyphen should be written
    - Finally the number of the functional requirement FR-P000-000 being 000 the incremental number of the requirement
* Art4- Once the first analysis of the document is made, the team should precced to repeat the analysis and find deeper requirements.
* Art5- Every non-functional requirement must be written in a .docx taken into account the name policies in the Art 3.1 just taking into account that the preffix now should be NFR instead of FR. (e.g: NFR-P321- 003)
* Art6- Since the functional and non functional requirements should have been correspondently documentated and analysed the team can continue looking for non-functional requirements.
  + Art6.1- The name of the document for the functional requirement must be of this type: FR000.pdf, being 000 the ID of the Project.
  + Art6.2- The name of the documentatio for the non fucntional requirement must be of this type: NFR000, being 000 the ID of the Project.
* Art7- Once that all the requirements have been concreted, both documents, the one with the functional requirements and the other one with the non-functional requirements should be sent to the design team.

**Software architecture design process.**

This part is in charge of providing a design for the software that implements and can be verified against the requirements. In this way every requirement should be covered.

* Art1- Every team in charge of this part will be composed of 4 members.
* Art2- The team will reveive a document containing all the functional and the nonfucntional requirements, which should be covered by the architecture
* Art3- Every decisión taken at this moment for a specific requirement (functional or non-functional) shoud be documented in a specific .docx document.
  + Art3.1- The name of that document should follow the next rules:
    - The first three letters should be ARC.
    - Followed by a hyphen splitting.
    - After that the ID of the requirement that can be solved with that
    - If a versioning is needed and changes are made in that document, both are saved and the last one gets added a point and a incremental number( .1, .2, .3, .4…)
* Art4- Every decisión should be taken in meetings, taken into account that the different parts of the team has to expose why that decisión has been taken and why they think its the optiimal one.
* Art5- At the end of the process, the implementer should deliver a documentation explaining why the architecture designed fulfils these characteristics:
  + Traceability to the requirements of the software item.
  + External consistency with the requirements of the software item.
  + Internal consistency between the software components.
  + Appropriateness of design methods and standards used.
  + Feasibility of detailed design.
  + Feasibility of operation and maintenance.
* Art6- Finally speciled diagrams and documentation is given to the software design process group.