**CHAPTER-3**

**SYSTEM REQUIREMENTS**

**3.1 Functional requirements**

Function requirement in our project are:

* To ensure, the web camera is on all the time towards the baby, in case anything is wrong then message will be sent to the user also the user can display the child on there on phone.
* In case if the baby is seen and heard to be crying using the sound sensor the swing cradle begin to swing using its algorithm.
* Room temperature sensor will detect if the temperature of the room is greater than 28 0 C then the fan will be turned on else the heater will be turned on.
* Baby’s body temperature can be checked to detect the body temperature, if it is above normal then the immediate notification is sent.
* Light intensity control, in case if any light enters in the crib, that there is light around the baby to come and console the baby.

**3.1 Non-Functional requirements**

* As stated above that this a project is still ongoing research, and there is a lot more that needs to be discovered, hence in case of any emergency the parent or the guardian should be within some reach so that if anything unexpected happens the person can help.
* Portability is another non-functional requirement since the cradle can be fixed to one particular position and enable the cradle the function there.
* Pattern generation is not needed, because it’s an IOT based application and a child’s behaviour cannot be predicted by any machine.
* No training needs to be given to any individual to run this machine it will work on its own as long as the machine is connected to the electric plug point.
* The software will not consume much space, it only requires space for communication purpose it doesn’t need to store anything much to retain details, apart from baby details.