Waterfall Model

In a waterfall model each phase must be completed before the next phase can begin and there is no overlapping in the phases. This means that any phase in the development process begins only if the previous phase is complete

**\*Requirement gathering and analysis-** in this phase all the requirements of the system are developed and documented. In our project “Aahar” the requirements all we need is firstly to contact all the nearby hostels, houses and to share this idea with them and request them to help for this initiative and give the left out food or the food that has been wasted specially the peel of fruits because it adds nutrients and nitrogen to the soil as they decompose and are particularly effective for use as a natural fertilizer, secondly we require a transportation facility to pick up the food from the people twice daily, and most importantly a smart dustbin that will calculate points according to the weight of the waste dump by the users and they will be rewarded with accordance to their points. We also want people individually to give their feedback and suggestions that can be implemented for this scenario and making it more effective.

**\*System Design**

System design in Aahar includes what can be the possible model made from all the requirements. System a surface design of the plan that how food will be transferred from hostel or homes to NGO, and further to build the design keeping its scope and scalability in mind. That if further the Aahar grows then, how much it’s the design can be improved.

**\*Implementation**

In this phase the inputs from the system design are taken and then the system is developed in small programs called units and each unit is developed and tested for its functionality. Globally India is the leading producer of fruits. Fruits after consumption leave peel which is nuisance to the environment as a solid waste. The fruit peels of banana, orange, lemon, were collected from a local market and their leaves. These fruit peel will be used by us, to prepare manures for the farm which will be given to farmers in low prices.

Hostels nearby are left with a lots of food which is wasted and thrown. The idea which is going to be implemented using this design is to transfer this food from hostels and homes to NGO by some transportation.

**\*Integration and Testing**

All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures. In our project “Aahar” finally all modules are integrated as a one system. All the possible failures which can be generated in Aahar is tested in this phase like the idea of transportation from hostel to NGO. Are hostels, going to agree for transportation on food.

**\*Performance**

Theoretically, the idea is implemented, but the main problem will be identified only when “Aahar” is going to be brought in the market for performance. Then an evaluation will be made that how well Aahar is performing. Are hostels agreeing with the policies or Aahar or not. How many numbers of people agree to work with us.