**METHODOLOGY**

According to the needs of this project, we have thought of applying the methodology of Adaptive Software Development (ASD), with the model of software development, of prototypes, we hope that with this combination of methodology and model, the development of our Automatic curtains project have the maximum potential and we can take advantage of all the possibilities that this project has.

In this project, as it is not necessary to use interfaces and great uses of programming, we have opted for the methodologies that are more directed towards the creation of prototypes and test devices, in this case they are the methodology of adaptive software Development (ASD) and with the prototype model, with deliveries scheduled for Friday of each week, so we can ensure that we will comply with the times that have placed us. Following the ASD methodology, we will divide our working times into 3 important points, start with speculation, at this point discuss the risks that the project has, if feasible or not, the way we will take the rest of Processes necessary for the realization of the project, we will also discuss how we will adapt and use the prototype model, Finishing the first meeting with the Division of Works and the market to which the project will be directed, obtaining in this way, quick and concrete results, for the satisfaction of our client. Once taken and reviewed all possible risks, we will have a successful number, about how long we could take this project and how many times we would have to restart the project in case of finding something a failure, locating and focusing on the error, to maintain the quality and the final time of the product.

With the stage of speculation, immediately start with the stage of collaboration, this stage is focused on developing the whole project, at this point we will create the code for the PIC and design the physical prototype, to see how it works the pic with the code and all the devices, motors, photo resistors, cables and with the same curtain, at this point we will have calculated the weight of the curtain, the amount of energy needed for the use of the device set and have in particular the work of each member of the team.

The organization of the team will be in this way, I Fernando Mijangos, I'll be the leader of the group and the person in charge of revising the prototype's physical designs, between the paperwork, I will touch to do the methodology, specify how to develop this project, with what kind of Philosophy, methodology and model, we will develop the project, assuring the quality. Efficiency and speed in the product, I will also be in charge of revising the risks that this project has, ensuring that it is feasible.

Hector Ceh, will be the main developed of the code, because it is the most knowledgeable of the programming language that we will use, will be the second in command in the project and will be in charge of the optimization and improvement of our project, as long as it is within our reach and Be the most feasible way to carry out the development of the project, in the paperwork, he will have the task of making the executable files

Citllaly Perez, she will be the third in command, be responsible for the observation of the project, monitoring the use of materials, resources and budget, to be in charge of all this, have to ensure the development of the project as feasible as possible, Following the list of risks that will be given to you and be constantly checking the code, looking for possible failures or errors, preparing a list for the improvement of the project and advancing a bit, The learning process, which will be the last step in the methodology of ASD, which we will use in this project, in this way we will ensure that the times are fulfilled in the way that is planned and avoiding delay the project, in the paperwork she'll have the task of Make the recommendations, as it will be the most attached to the observation of the project.

We all have the task of programming the code and make a UML diagram, besides that we all help in the creation of the prototype, this way we will fulfill the times and maximize the resources without having to spend others, getting the best Results, in time and form.