DESIGN AND DEVELOPMENT OF AN AUTO SLIDING MECHANISM FOR SMART PLAYGROUND

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ABSTRACT

Our project title "Design and Development of an Auto Sliding Mechanism for Smart Playground" addresses the issue of automating the traditional slide mechanism in the playgrounds.

Playing with slides in the playground has been a shared experience for almost every person during childhood times. Although it is just a simple game, but there is still some special attractiveness about it which made it able to remain until now. However now in the modern days, it seems to have lost the competition when everything seems newer and more exciting when implemented with more advanced technologies for example the roller coaster. So this is where the idea for out project title came out which is to "Design and Develop an Auto Sliding Mechanism for Smart Playgrounds" which will maintain the original attractiveness of traditional slides but combine it with some automatic mechanism and technologies similar to roller coasters to revolutionize the way of playing traditional slides.

Our project prototype will consist of auto moving chairs to carry slide players from ground to one slide and then from ground to another slide continuously. Players can enjoy the fun of playing with slides, and at the same time enjoy the fun of riding on an auto moving chair that elevates from ground to a high level point which will be an exciting experience.

Safety factor is always taken into consideration for this project therefore some safety features are implemented and will be explained in more detail later in this report.