



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

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<b>Project Title</b> Does Password Complexity Increase with Age?	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of this study is to determine if people's passwords get more complex with age.</p> <p><b>Methods/Materials</b> Gathered 3 passwords from each of the 127 different people through the use of Survey Monkey, an online survey tool. Created an algorithm in Excel to determine password complexity.</p> <p><b>Results</b> The algorithm that I devised allowed me to easily determine password complexity for each password, average password complexity by age, and the running average password complexity by age.</p> <p><b>Conclusions/Discussion</b> Password complexity generally increased with age, but did not decline after age 60. After age 60, 50% of the passwords were better than the passwords from younger participants.</p>	
<b>Summary Statement</b> I devised an algorithm that determines the complexity of passwords and how this complexity changes based on the age of a user.	
<b>Help Received</b> My parents helped gather most of the adult participants for my project. I also used a user-defined function, from an internet search, to determine if special characters were present in a cell in Excel.	