



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

<b>Name(s)</b> Sean F. Duarte	<b>Project Number</b> <b>J0409</b>
<b>Project Title</b> <b>Does Password Complexity Increase with Age?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of this study is to determine if people's passwords get more complex with age. <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. <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. <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.	
<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.	