**Introduction:**

            Our society today consists of technologically advanced software and equipment. Smart phones are a growing necessity with an internal growing market. With the inclusion of an app store, users can purchase or download many games, utilities and others.  Our assumption is that there is a direct correlation between age and the amount of apps a person might download. We believe that many Smartphone users that are younger tend to download more apps while the older population shows more conservatism.

**Population:**

Our experiment begins in the city tech college. We gathered 50 people, having a specific age range of 18 years old to 28 years old.

**Variables:**

            The variables of this survey would be the number of apps and age of the person. For the bar graph, x axis consist of the number of apps and y axis would represent the number of people with the amount of apps. The scatter plot shown, displays the correlation between the age and the amount of apps one has.

**Data Collection:**

The survey was randomly given out to 50 people, consists of age and the number of apps had on their Smart phones. We tried to narrow our survey, only to users who had Smart phones in order to show true data. Gender wise, we really didn’t consider how many males or females we wanted to survey.

|  |  |  |  |
| --- | --- | --- | --- |
| **Survey #** | **Age** | **# of Apps** | **Gender** |
| 1 | 20 | 47 | Male |
| 2 | 19 | 61 | Male |
| 3 | 19 | 45 | Female |
| 4 | 26 | 39 | Male |
| 5 | 28 | 31 | Female |
| 6 | 23 | 46 | Female |
| 7 | 26 | 36 | Male |
| 8 | 27 | 33 | Female |
| 9 | 19 | 48 | Male |
| 10 | 20 | 50 | Female |
| 11 | 18 | 48 | Male |
| 12 | 22 | 63 | Female |
| 13 | 23 | 72 | Female |
| 14 | 19 | 48 | Male |
| 15 | 18 | 53 | Male |
| 16 | 22 | 57 | Female |
| 17 | 21 | 59 | Female |
| 18 | 24 | 63 | Male |
| 19 | 19 | 65 | Female |
| 20 | 25 | 44 | Female |
| 21 | 26 | 43 | Male |
| 22 | 22 | 71 | Female |
| 23 | 23 | 51 | Female |
| 24 | 24 | 79 | Male |
| 25 | 19 | 62 | Female |
| 26 | 21 | 55 | Male |
| 27 | 26 | 47 | Female |
| 28 | 27 | 25 | Female |
| 29 | 19 | 72 | Female |
| 30 | 20 | 63 | Male |
| 31 | 22 | 65 | Male |
| 32 | 23 | 48 | Male |
| 33 | 22 | 57 | Female |
| 34 | 27 | 29 | Female |
| 35 | 18 | 44 | Male |
| 36 | 25 | 40 | Male |
| 37 | 22 | 57 | Female |
| 38 | 19 | 52 | Female |
| 39 | 18 | 49 | Male |
| 40 | 22 | 45 | Female |
| 41 | 24 | 48 | Male |
| 42 | 22 | 64 | Female |
| 43 | 27 | 33 | Male |
| 44 | 22 | 53 | Male |
| 45 | 26 | 32 | Female |
| 46 | 18 | 59 | Male |
| 47 | 20 | 43 | Female |
| 48 | 18 | 73 | Male |
| 49 | 19 | 53 | Female |
| 50 | 20 | 81 | Female |

|  |  |
| --- | --- |
| sample size : | 50 |
| mean: | 52.7 |
| standard dev: | 13.45021 |

R = - .53

-Slightly decreasing trend line

-As the numbers of surveyed participants are getting older, we see that the trend line shows a decrease in downloading of apps.

R ^2 = 0.2827

-The variance between the x and y values for the scatter plots is about 28%

- In hindsight, only 28% of the time, the graph would show accurate values.

y = -2.2918x + 102.39

-If I were to plug in 18 years old, to the x value, it would give me 61.

(-2.2918(18) + 102.39)

-The number 61 represents the average amount of apps that the 18 year old would be on their Smartphone.

**Conclusion:**

Our prediction of the amount of apps a person has correlating with their age number was correct. As an individual gets older, we see in the graph that they tend to download less Apps. And the younger the individual is, the more apps they tend to download.