|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Samsung mobile software shows full incredibly bright color. Exquisitely supreme curve.. With really matchless UV aging just like LED. | full incredibly bright color | bright |  | incredibly |  | 0.2614 |
| Exquisitely supreme curve | supreme |  | Exquisitely |  | 0.3125 |
| really matchless UV aging | matchless |  | really |  | 0.50 |

* **Full incredibly bright color**

Value = 1− (1− SentiScore) x

SWN score of bright = 0.2614

Incredibly = x = 2.5

1 – (1-0.2614)2.5 = 0.5311

* **Exquisitely supreme curve**

Value = 1− (1− SentiScore) x

SWN score of supreme = 0.3125

Exquisitely = x = 2.8

1 – (1-0.3125)2.8 = 0.649

* **Really matchless UV aging**

Value = 1− (1− SentiScore) x

SWN score of matchless = 0.50

really = x = 2

1 – (1-0.50)2 = 0.75

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.6433**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.8216**

**Following Review is in “Very Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Traditional Chinese mobiles sold fairly well all over the world | sold fairly well | well |  | fairly |  | 0.3541 |

* **Sold fairly well**

Value = 1− (1− SentiScore) x

SWN score of well = 0.3541

fairly = x = 0.8

1 – (1-0.3541)0.8 = 0.2950

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.2950**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.6475**

**Following Review is in “Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| You can swap out some components and get a marginally heavier Samsung mobile under 30000. It is virtually difficult to get knowledge about the Samsung mobile software and apps. | get a marginally heavier Samsung mobile |  | heavy | marginally |  | 0.0917 |
| It is virtually difficult to get knowledge |  | difficult | virtually |  | 0.6875 |

* **Get a marginally heavier Samsung mobile**

Value = 1− (1− SentiScore) x

SWN score of heavy = 0.0917

marginally = x = 1.7

1 – (1-0.0917)1.7 = 0.150

* **It is virtually difficult to get knowledge**

Value = 1− (1− SentiScore) x

SWN score of difficult = 0.6875

virtually = x = 2.2

1 – (1-0.6875)2.2 = 0.9226

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.536**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.768**

**Following Review is in “very positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| When her fingers were too tired to write messages on mobile, then she should stop chatting and take rest. | When her fingers were too tired to write messages |  | tired | too |  | 0.1875 |

* **When her fingers were too tired to write messages**

Value = 1− (1− SentiScore) x

SWN score of tired = 0.1875

too = x = 1.6

1 – (1-0.1875)1.6 = 0.2826

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.2826**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.6413**

**Following Review is in “Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| I am virtually clueless when it comes to web design but I m slightly hoping my boss can give a few mobile phones. | I am virtually clueless |  | clueless | virtually |  | 0.5 |
| I m slightly hoping | hoping |  | slightly |  | 0.1944 |

* **I am virtually clueless**

Value = 1− (1− SentiScore) x

SWN score of clueless = 0.5

Virtually = x = 2.2

1 – (1-0.5)2.2 = 0.7823

Since the word has negative polarity so we will multiply it with -1

0.7823 X -1= -0.7823

* **I am slightly hoping**

Value = 1− (1− SentiScore) x

SWN score of hoping = 0.1944

slightly = x = 1.7

1 – (1-0.1944)1.7 = 0.3075

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.2374**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.3813**

**Following Review is in “Negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| American are very very interested in modern technology of mobile software using by Pakistani Software Engineers with ravishingly sublime efforts | American are very very interested in modern technology | interested |  | Very very |  | 0.3125 |
| Pakistani Software Engineers with ravishingly sublime efforts | sublime |  | ravishingly |  | 0.3542 |

**Americans are very very interested in modem technology**

Value = 1− (1− SentiScore) x

SWN score of interested = 0.3125

Very very= x = 4

1 – (1-0.3125)4 = 0.7765

* **Pakistani software engineers with ravishingly sublime efforts**

Value = 1− (1− SentiScore) x

SWN score of sublime = 0.3542

ravishinglly = x = 3.2

1 – (1-0.3542)3.2 = 0.7532

Since the word has negative polarity so we will multiply it with -1

0.7532 X -1= -0.7532

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.01165**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.505**

**Following Review is in “Neutral” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| The Pixel 2 is all about two things: taking exquisitely fantastic photos. And fairly unrivalled Google's software. | taking exquisitely fantastic photos | fantastic |  | exquisitely |  | 0.375 |
| And fairly unrivalled Google's software | unrivalled |  | fairly |  | 0.5 |

* **Taking exquisitely fantastic photos**

Value = 1− (1− SentiScore) x

SWN score of fantastic = 0.3375

Exquisitely= x = 2.8

1 – (1-0.3375)2.8 = 0.6842

* **And fairly unrivalled Google’s software**

Value = 1− (1− SentiScore) x

SWN score of unrivalled = 0.5

Fairly = x = 0.8

1 – (1-0.5)0.8 = 0.4256

Since the word has negative polarity so we will multiply it with -1

0.4256 X -1= -0.4256

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.1293**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.5646**

**Following Review is in “Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| India has marginally raised the prices of oppo mobiles.  As OPPO has radical redesign that's nearly all screen includes a tremendously steadfastness cutting-edge having facial recognition feature | India has marginally raised the prices of oppo mobiles |  | raised | marginally |  | 0.0417 |
| includes a tremendously steadfastness cutting-edge |  | steadfastness | tremendously |  | 0.375 |

**India has marginally raised the prices of oppo mobiles**

Value = 1− (1− SentiScore) x

SWN score of raised = 0.0417

Marginally= x = 1.7

1 – (1-0.0417)1.7 = 0.0698

Since the word has negative polarity so we will multiply it with -1

0.0698 X -1= -0.0698

* **Includes a tremendously steadfastness cutting edge**

Value = 1− (1− SentiScore) x

SWN score of steadfastness = 0.375

tremendously = x = 3

1 – (1-0.375)3= 0.755

Since the word has negative polarity so we will multiply it with -1

0.755 X -1= -0.755

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.4124**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.2938**

**Following Review is in “Very Negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Chinese Phones of now a day’s having awful faulty speakers. And mushy complex with heavy weightage structure | Chinese Phones of now a day’s having awful faulty speakers. |  | faulty | awful |  | 0.375 |
| And mushy complex with heavy weightage structure |  | Complex | mushy |  | 0.025 |

* **Chinese phones of now days having awful faulty speakers**

Value = 1− (1− SentiScore) x

SWN score of faulty = 0.375

Awful= x = 2.3

1 – (1-0.375)2.3 = 0.6607

Since the word has negative polarity so we will multiply it with -1

0.6607 X -1= -0.6607

* **And mushy complex with heavy weightage structure**

Value = 1− (1− SentiScore) x

SWN score of complex = 0.025

mushy = x = 3

1 – (1-0.025)3= 0.0731

Since the word has negative polarity so we will multiply it with -1

0.0731 X -1= -0.0731

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.3669**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.31655**

**Following Review is in “Very negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| We have to continue with this slightly difficult task of improving mobile software in Pakistan. | We have to continue with this slightly difficult task |  | difficult | slightly |  | 0.6875 |

* **We have to continue with this slightly difficult task**

Value = 1− (1− SentiScore) x

SWN score of difficult = 0.6875

Slightly = x = 1.7

1 – (1-0.6875)1.7= 0.8615

Since the word has negative polarity so we will multiply it with -1

0.8615 X -1= -0.8615

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.8615**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.06925**

**Following Review is in “Extremely Negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| The picture he captured by his mobile camera was very very clear. | The picture he captured by his mobile camera was very very clear. | clear |  | very very |  | 0.2 |

**This picture he captured by his mobile camera was very very clear**

Value = 1− (1− SentiScore) x

SWN score of clear = 0.2

Very very= x = 4

1 – (1-0.2)4 = 0.5904

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.5904**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.7952**

**Following Review is in “Very Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Very early in her life she become almost totally blind by using too dangerous mobile, and she entered in an eye care Hospital, when she was fourteen years old. | Very early in her life | Early |  |  |  | 0.0556 |
| she become almost totally blind |  | blind |  |  | 0.2375 |
| by using too dangerous mobile |  | Dangerous |  |  | 0.6875 |

* **Very early in her life**

Value = 1− (1− SentiScore) x

SWN score of early = 0.0556

Very= x = 2

1 – (1-0.0556)2= 0.802

* **She became almost totally blind**

Value = 1− (1− SentiScore) x

SWN score of blind = 0.2375

Totally = x = 4.5

1 – (1-0.2375)4.5= 0.704

Since the word has negative polarity so we will multiply it with -1

0.7042 X -1= -0.7042

* **By using too dangerous mobile**

Value = 1− (1− SentiScore) x

SWN score of dangerous = 0.6875

Too = x = 1.6

1 – (1-0.6875)1.6= 0.8444

Since the word has negative polarity so we will multiply it with -1

0.8444 X -1= -0.8444

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.2488**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.3755**

**Following Review is in “Negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| she totally surprised me about functions of mobile. With extremely amazing apps of her mobile | she totally surprised me | surprise |  | totally |  | 0.0833 |
| With extremely amazing apps | amazing |  | extremely |  | 0.6875 |

* **She totally surprised me**

Value = 1− (1− SentiScore) x

SWN score of surprise = 0.0833

Totally= x = 4.5

1 – (1-0.0833)4.5 = 0.323

* **With extremely amazing apps**

Value = 1− (1− SentiScore) x

SWN score of amazing = 0.6875

Extremely = x = 3

1 – (1-0.6875)3= 0.969

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.646**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.8231**

**Following Review is in “Very Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| He sent me a video on my mobile in which the inhihabits are totally ruined, the hospitals are extremely overflow with sick and famine | the inhihabits are totally ruined |  | ruined | totally |  | 0.50 |
| the hospitals are extremely overflow |  | overflow | extremely |  | 0.1875 |

* **The inhabitants are totally ruined**

Value = 1− (1− SentiScore) x

SWN score of ruined = 0.50

Totally= x = 4.5

1 – (1-0.5)4.5 = 0.955

Since the word has negative polarity so we will multiply it with -1

0.955 X -1= -0.955

* **The hospitals are extremely overflow**

Value = 1− (1− SentiScore) x

SWN score of overflow = 0.1875

Extremely = x = 3

1 – (1-0.1875)3= 0.4636

Since the word has negative polarity so we will multiply it wiyh -1

0.4636 X -1 = -0.4636

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.7093**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.14535**

**Following Review is in “Extremely Negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| The Chinese telecommunication company has been manufacturing incredibly great mobile phone since 1997, which have totally ideal features from Samsung mobile | manufacturing incredibly great mobile | great |  | incredibly |  | 0.2679 |
| which have totally ideal feature | Ideal |  | totally |  | 0.30 |

**Manufacturing incredibly great mobile**

Value = 1− (1− SentiScore) x

SWN score of great = 0.2679

Incredibly= x = 2.5

1 – (1-0.2679)2.5 = 0.5414

* **Which have totally ideal feature**

Value = 1− (1− SentiScore) x

SWN score of ideal = 0.30

totally = x = 4.5

1 – (1-0.30)4.5= 0.7991

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.6702**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.8351**

**Following Review is in “Extremely Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Too much time had been wasting by him with the mobile phone. | too much time had been wasting |  | waste | too |  | 0.0938 |

* **Too much time had been wasting**

Value = 1− (1− SentiScore) x

SWN score of waste = 0.0938

too = x = 1.6

1 – (1-0.0938)1.6 = 0.1450

Since the word has negative polarity so we will multiply it with -1

0.1450 X -1= -0.1450

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = -0.1450**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.4275**

**Following Review is in ‘’Negative” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sometime she tries to spell very short words on mobile dictionary.  But she is too young to remember hard words. | Sometime she tries to spell very short words |  | short | Very |  | 0.1902 |
| She is too young to remember hard words. |  | young | Too |  | 0.0625 |

* **Sometimes she tries to spell very short words**

Value = 1− (1− SentiScore) x

SWN score of short = 0.1902

Very= x = 2

1 – (1-0.1902)2= 0.3442

* **She is too young to remember hard words**

Value = 1− (1− SentiScore) x

SWN score of young = 0.0625

Too = x = 1.6

1 – (1-0.0625)1.6= 0.098

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.2211**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.61055**

**Following Review is in “Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hauwei P9 smart phone has excellent performance of camera. With also too quick and accurate fingerprint sensor. | Hauwei P9 smart phone has excellent performance | Performance |  | Excellent |  | 0.075 |
| With also too quick and accurate fingerprint sensor. | Quick |  | Too |  | 0.625 |

**Hauwei P9 smart phone has excellent performance**

Value = 1− (1− SentiScore) x

SWN score of performance = 0.075

Excellent= x = 2.5

1 – (1-0.075)2.5= 0.1770

* **With also too quick and accurate fingerprint sensor**

Value = 1− (1− SentiScore) x

SWN score of quick = 0.625

Too = x = 1.6

1 – (1-0.625)1.6= 0.7918

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.4844**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.7422**

**Following Review is in “Very Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| The first invention of oppo mobile phone was phenomenally successful in Pakistan. | Phone was phenomenally successful in Pakistan. | Successful |  | Phenomenally |  | 0.625 |

* **Phone was phenomenally successful in Pakistan**

Value = 1− (1− SentiScore) x

SWN score of successful = 0.625

Phenomenally = x = 3.5

1 – (1-0.625)3.5= 0.9677

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.9677**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.9838**

**Following Review is in “Extremely Positive” module**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Overall, the market for Q mobile is luminously improving. | market for Q mobile is luminously improving | Improving |  | luminously |  | 0.75 |

* **Market for Q mobile is luminously improving**

Value = 1− (1− SentiScore) x

SWN score of improving = 0.75

Phenominally = x = 2.5

1 – (1-0.75)2.5= 0.968

Sum up the value of all statements and calculate the average using

**Bavg =**

**Bavg = = 0.968**

Now we will have to calculate “**Bn**”

The value of “**Bn**” calculated using falls in the range [−1, 1]. We further normalize this value using min-max normalization to map it to the range [0, 1] upon applying min-max normalization to “**Bn**” we get the normalized fuzzy bias value

**Bn** =

**= 0.9843**

**Following Review is in “Extremely Positive” module**