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Group name AppGallery &amp; Games

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Current Model label : y2

RandomForest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | f1-score | support |
| Others | 0.83 | 0.71 | 0.77 | 7 |
| Problem/Fault | 0.75 | 0.86 | 0.8 | 14 |
| Suggestion | 0.33 | 0.25 | 0.29 | 4 |
|  |  |  |  |  |
| accuracy |  |  | 0.72 | 25 |
| macro avg | 0.64 | 0.61 | 0.62 | 25 |
| weighted avg | 0.71 | 0.72 | 0.71 | 25 |

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Current Model label : y3

RandomForest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | f1-score | support |
| AppGallery-Install/Upgrade | 0.5 | 1 | 0.67 | 4 |
| AppGallery-Use | 1 | 0.5 | 0.67 | 2 |
| Coupon/Gifts/Points Issues | 1 | 0.8 | 0.89 | 5 |
| General | 0 | 0 | 0 | 2 |
| Third Party APPs | 1 | 0.5 | 0.67 | 2 |
| VIP / Offers / Promotions | 1 | 0.5 | 0.67 | 2 |
| nan | 0.75 | 0.86 | 0.8 | 7 |
|  |  |  |  |  |
| accuracy |  |  | 0.76 | 25 |
| macro avg | 0.75 | 0.67 | 0.67 | 25 |
| weighted avg | 0.77 | 0.76 | 0.74 | 25 |

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Current Model label : y4

RandomForest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | f1-score | support |
| Can't install Apps | 0..67 | 1 | 0.8 | 2 |
| Can't update Apps | 0 | 0 | 0 | 1 |
| Can't use or acquire | 0.75 | 0.75 | 0.75 | 4 |
| Cooperated campaign issue | 1 | 1 | 1 | 1 |
| Offers / Vouchers / Promotions | 1 | 1 | 1 | 3 |
| Other download/install/update issue | 1 | 1 | 1 | 1 |
| Others | 0.33 | 0.5 | 0.4 | 2 |
| Personal data | 0 | 0 | 0 | 1 |
| Refund | 1 | 1 | 1 | 2 |
| UI Abnormal in Huawei AppGallery | 1 | 1 | 1 | 1 |
| nan | 0.71 | 0.71 | 0.71 | 7 |
|  |  |  |  |  |
| accuracy |  |  | 0.76 | 25 |
| macro avg | 0.68 | 0.72 | 0.7 | 25 |
| weighted avg | 0.72 | 0.76 | 0.74 | 25 |

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Model AppGallery &amp; Games Output :

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y2: (array([0, 1, 2]), array([32, 71, 19]))

y3: (array([0, 1, 2, 3, 5, 6, 7]), array([23, 8, 25, 8, 10, 13, 35]))

y4: (array([ 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14]), array([11, 2, 19, 7, 13, 7, 10, 2, 11, 5, 35]))

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Models Accuracy:

y2 : 0.9426229508196722

y3 : 0.8934426229508197

y4 : 0.8360655737704918

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Group name In-App Purchase

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Current Model label : y2

RandomForest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | f1-score | support |
| Problem/Fault | 0 | 0 | 0 | 2 |
| Suggestion | 0.88 | 0.93 | 0.9 | 15 |
|  |  |  |  |  |
| accuracy |  |  | 0.82 | 17 |
| macro avg | 0.44 | 0.47 | 0.45 | 17 |
| weighted avg | 0.77 | 0.82 | 0.8 | 17 |

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Current Model label : y3

RandomForest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | f1-score | support |
| Invoice | 0 | 0 | 0 | 2 |
| Other | 0.88 | 0.93 | 0.9 | 15 |
| Payment | 0.8 | 1 | 0.89 | 12 |
| Payment issue | 1 | 0.5 | 0.67 | 2 |
|  |  |  |  |  |
| accuracy |  |  | 0.82 | 17 |
| macro avg | 0.7 | 0.5 | 0.56 | 17 |
| weighted avg | 0.8 | 0.82 | 0.78 | 17 |

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Current Model label : y4

RandomForest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | f1-score | support |
| Invoice related request | 0 | 0 | 0 | 2 |
| Query deduction details | 0.0 | 0 | 0 | 1 |
| Risk Control | 1 | 1 | 1 | 2 |
| Subscription cancellation | 0.73 | 1 | 0.85 | 11 |
| nan | 0 | 0 | 0 | 1 |
|  |  |  |  |  |
| accuracy |  |  | 0.76 | 17 |
| macro avg | 0.35 | 0.4 | 0.37 | 17 |
| weighted avg | 0.59 | 0.76 | 0.67 | 17 |

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Model In-App Purchase Output :

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y2: (array([1, 2]), array([ 9, 75]))

y3: (array([0, 1, 2, 3]), array([ 7, 5, 63, 9]))

y4: (array([0, 2, 3, 4, 6]), array([ 6, 4, 9, 58, 7]))

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Models Accuracy:

y2 : 0.9404761904761905

y3 : 0.9047619047619048

y4 : 0.8571428571428571