

# Model Evaluation

# Confusion Matrix

Negative Class

**TN**

True Negative

**FP**

False Positive

Positive Class

**FN**

False Negative

**TP**

True Positive

Predicted Negative

Predicted Positive

# Confusion Matrix

Negative Class

**TN**

True Negative

**FP**

False Positive

Positive Class

**FN**

False Negative

**TP**

True Positive

Predicted Negative

Predicted Positive

# Confusion Matrix

**Negative Class**

78

31

**Positive Class**

10

82

**Predicted Negative**

**Predicted Positive**

# Confusion Matrix

**Negative Class**

78

31

**Positive Class**

10

82

**Predicted Negative**

**Predicted Positive**

# Confusion Matrix

Negative Class

78

31

Positive Class

10

82

Predicted Negative

Predicted Positive

accuracy

$160/201 = .89$

# Confusion Matrix

Negative Class

78

31

Positive Class

10

82

Predicted Negative

Predicted Positive

recall  
 $82/92 = .89$

# Confusion Matrix

Negative Class

78

31

Positive Class

10

82

Predicted Negative

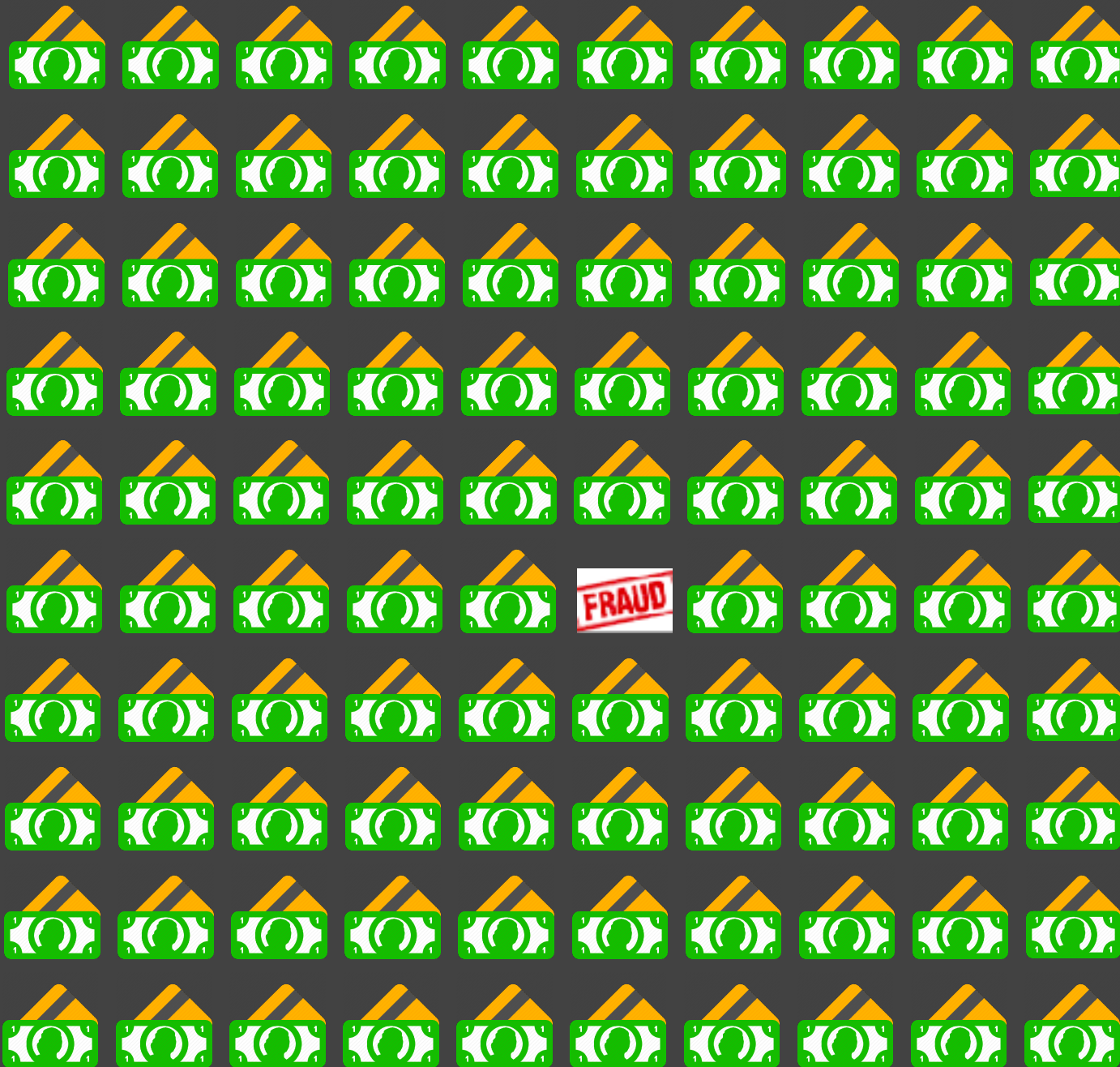
Predicted Positive

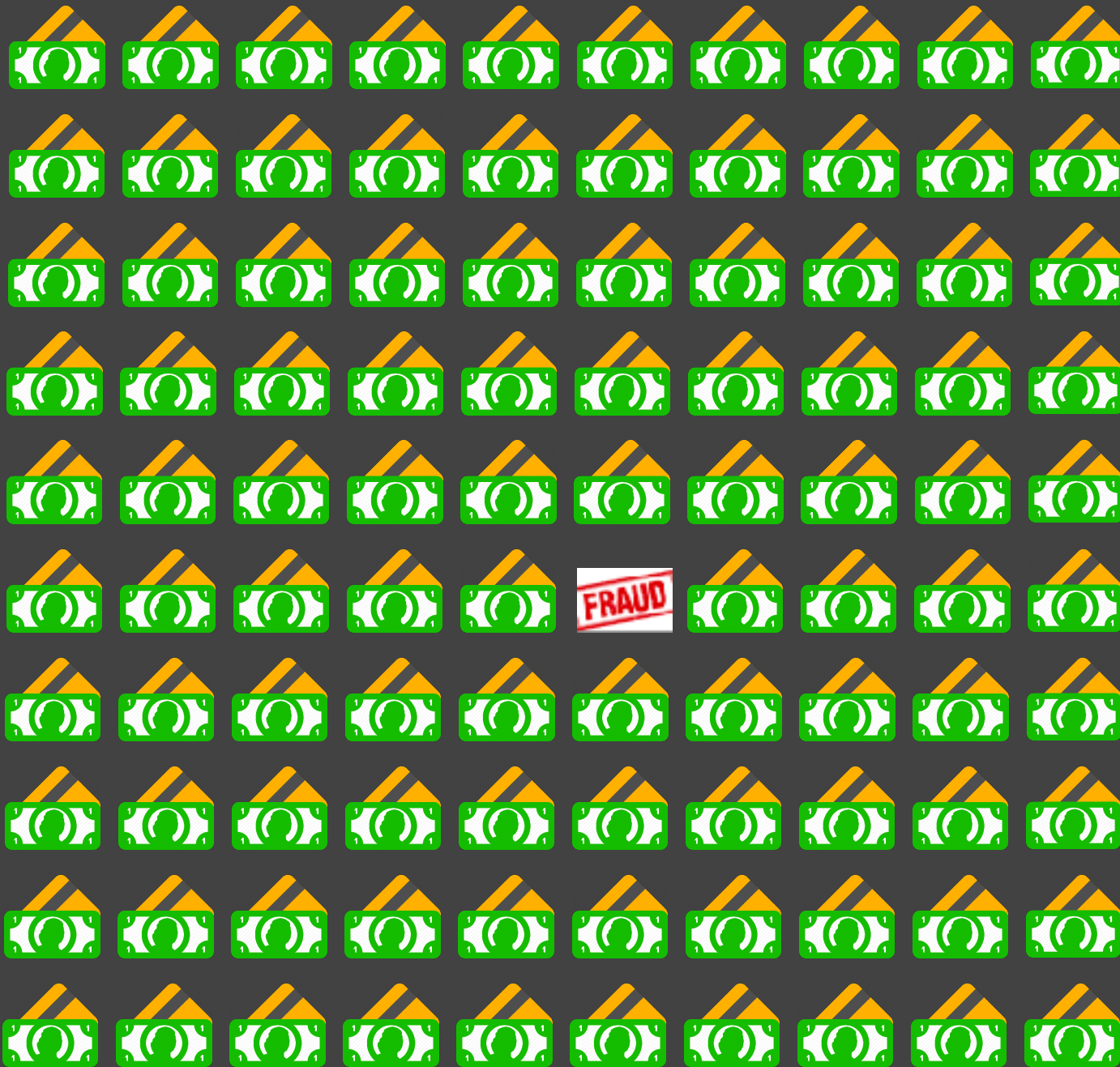
$82/113 = .73$  precision



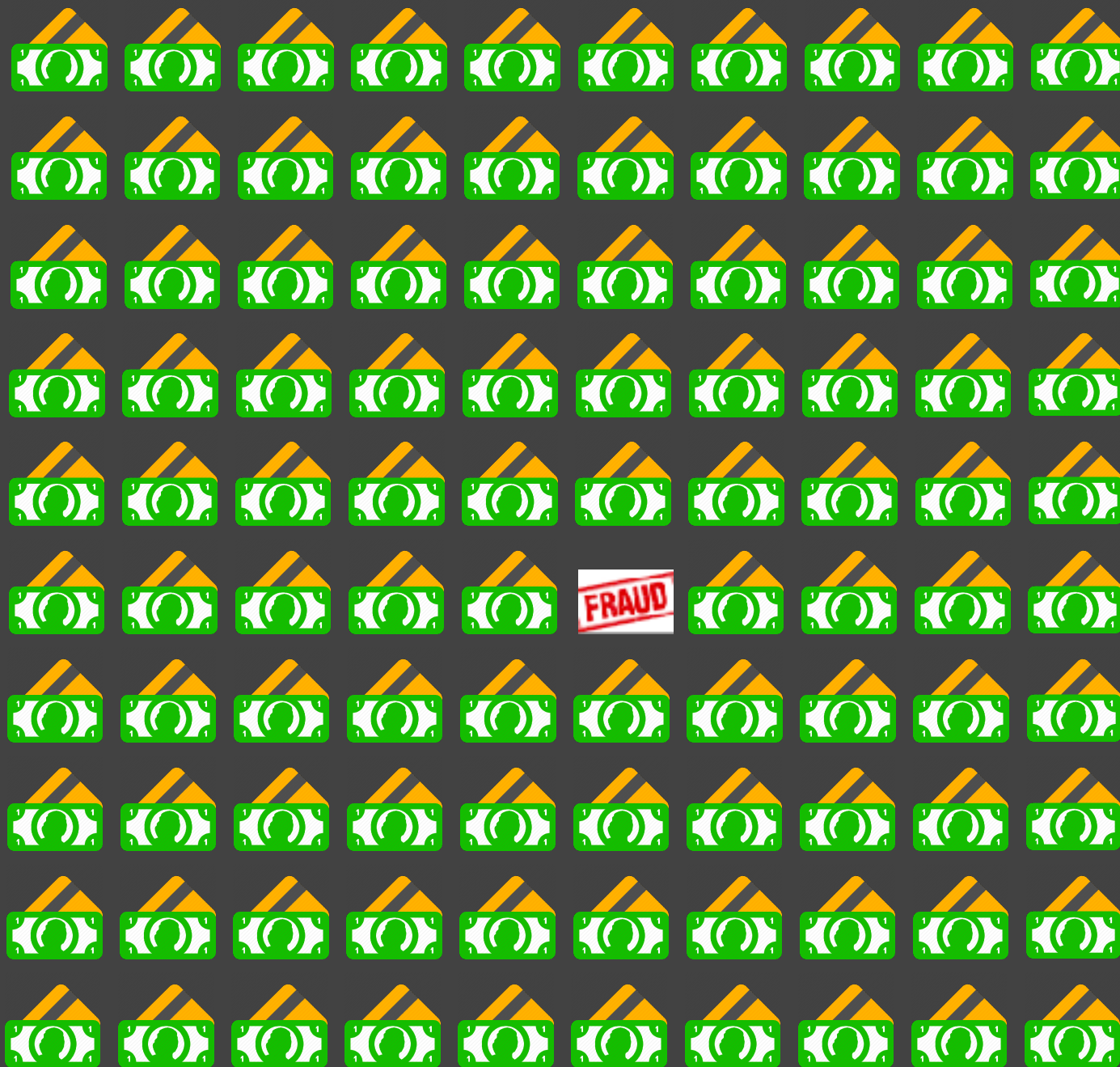
# Fraud Detection



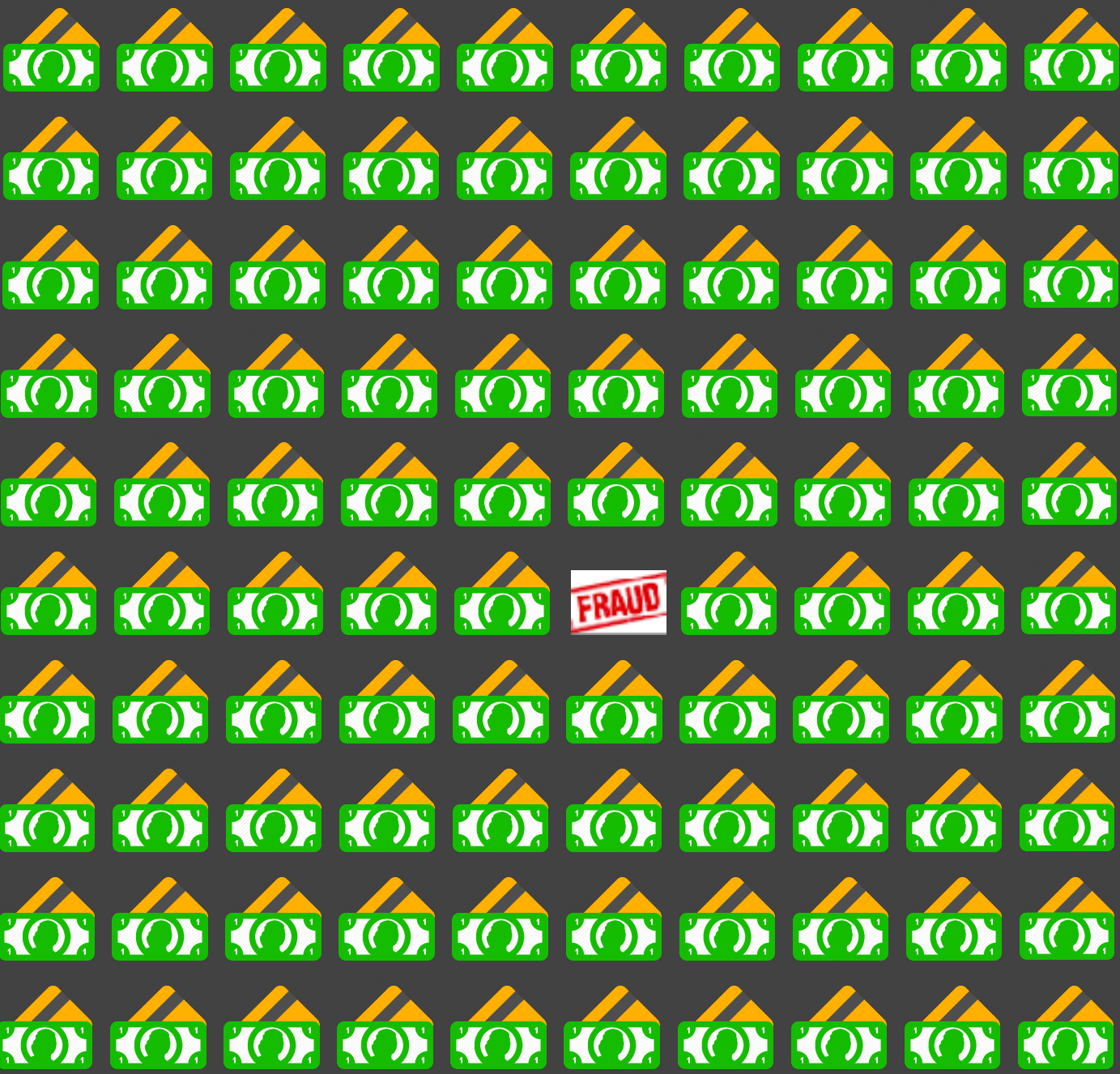


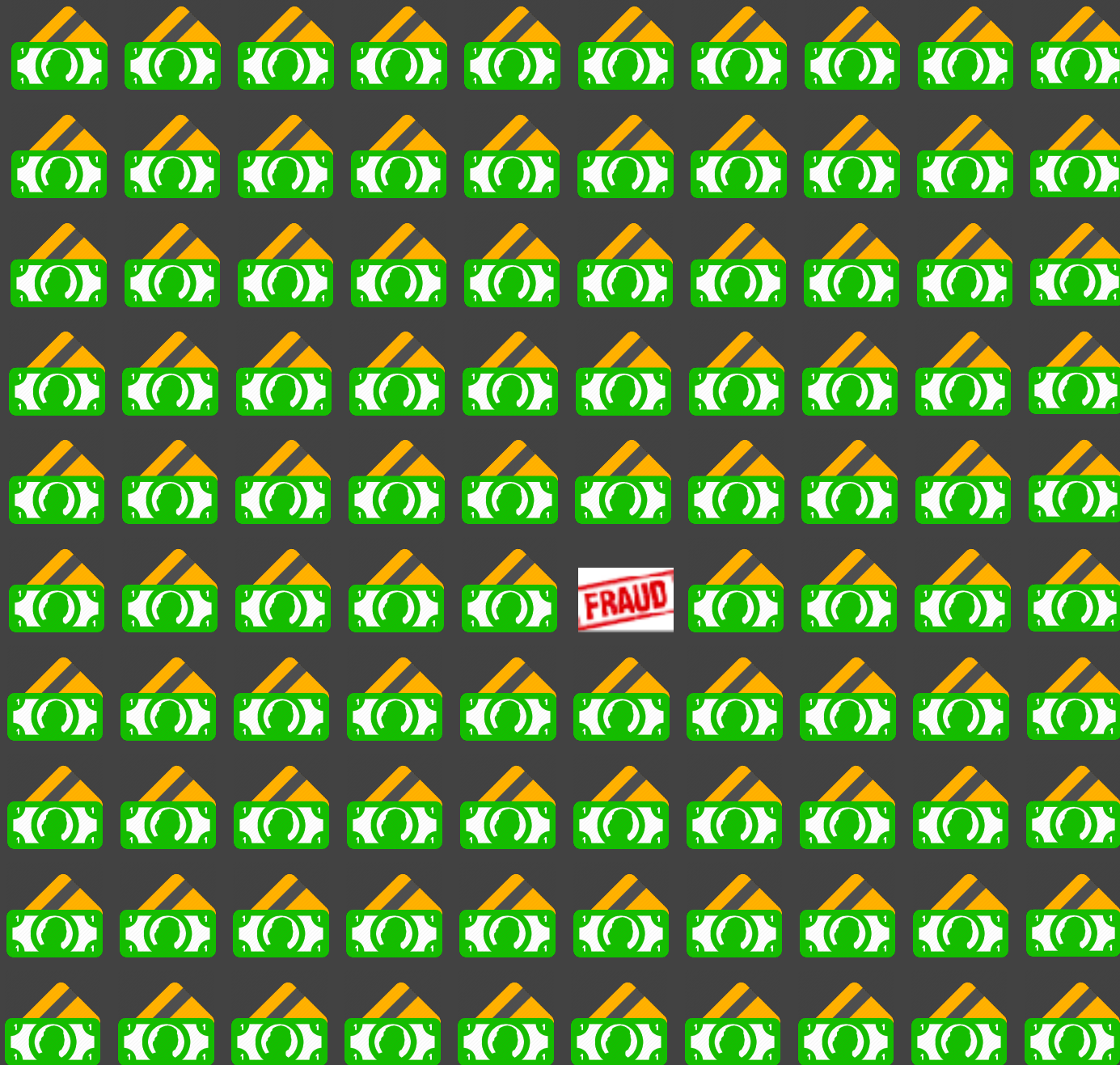


Accuracy

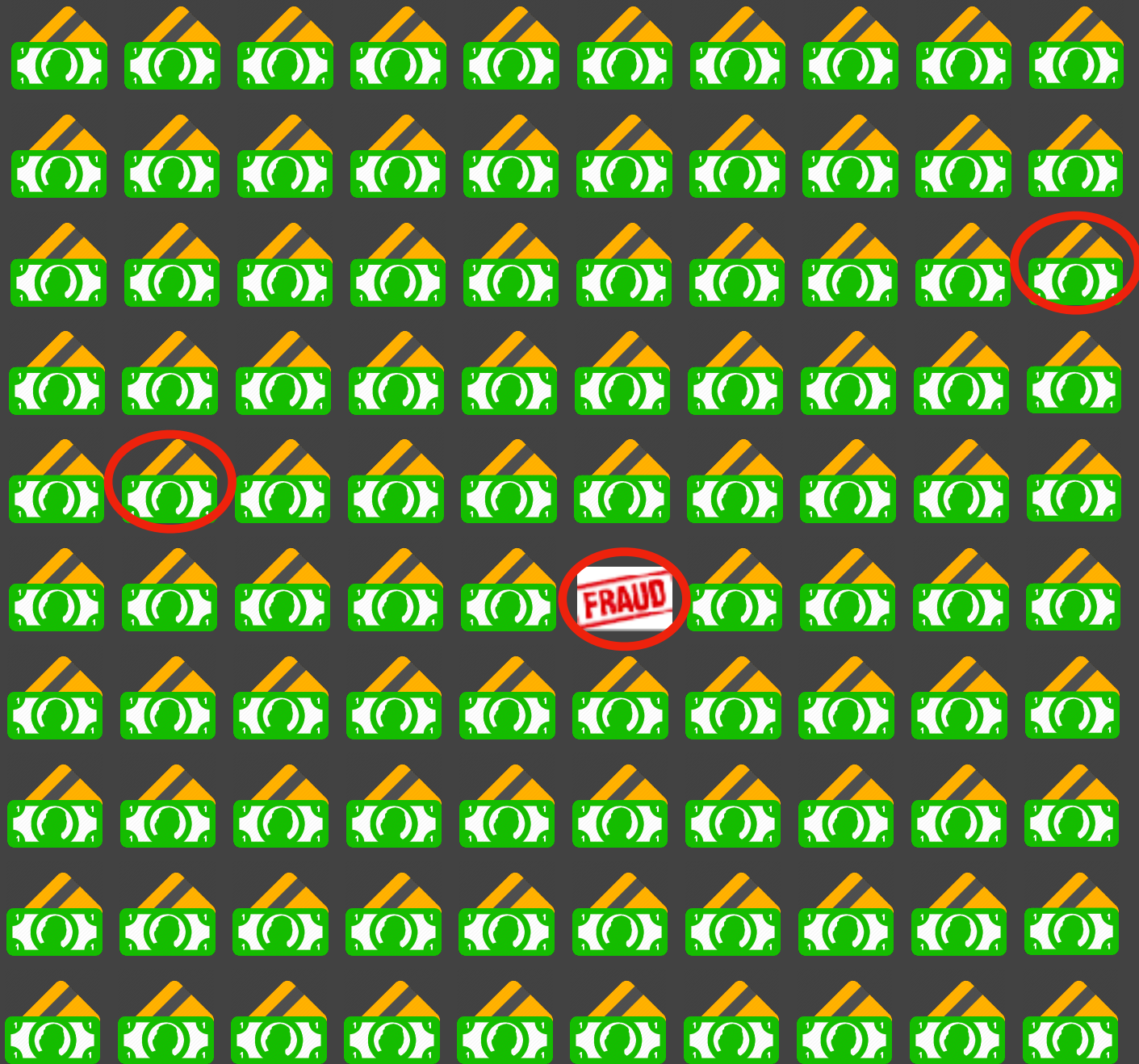


Accuracy  
99%

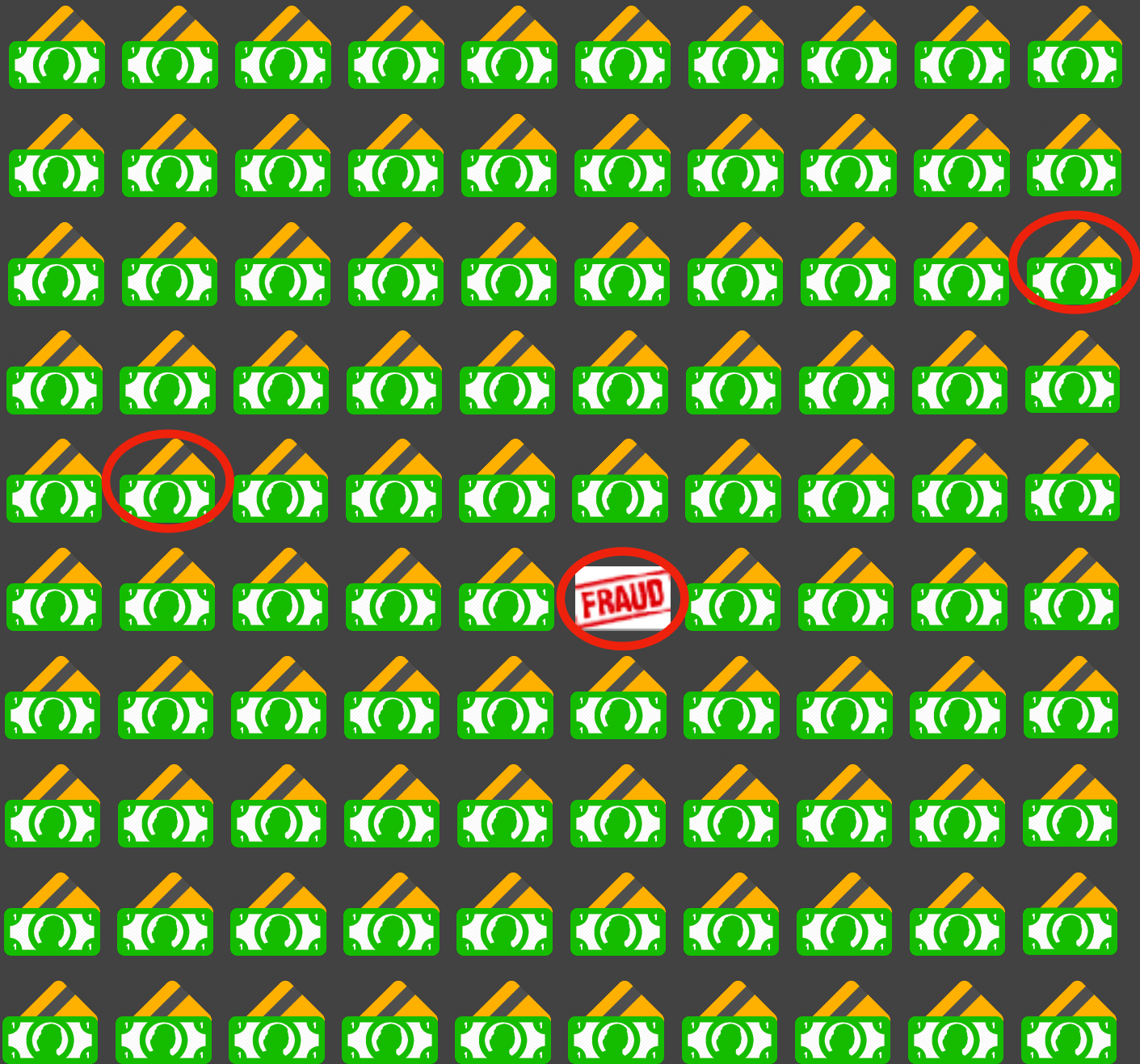




Precision & Recall



Precision



## Confusion Matrix

True Neg

97

2

True Pos

0

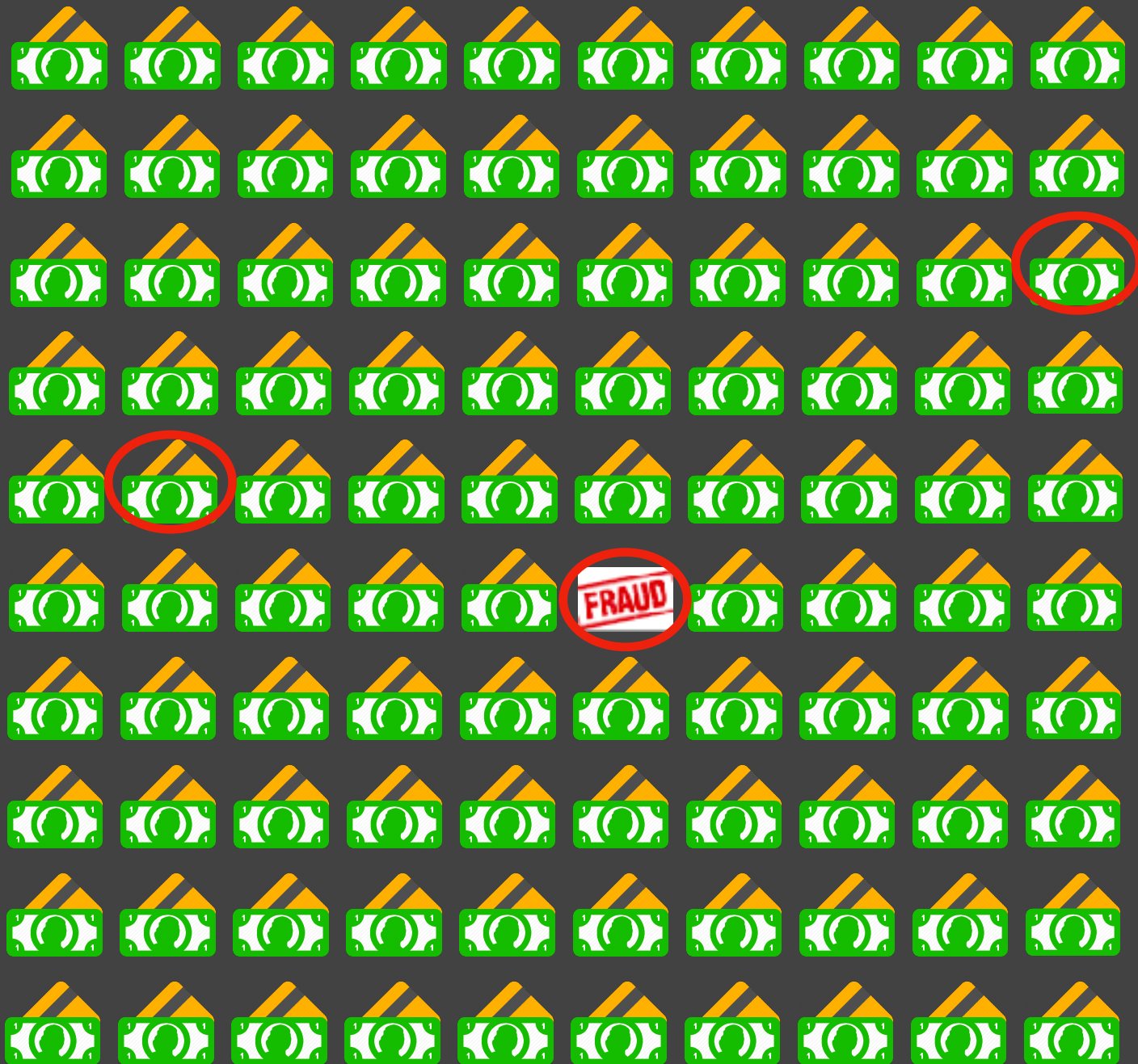
1

Pred Neg

Pred Pos

Precision





## Confusion Matrix

True Neg

97

2

True Pos

0

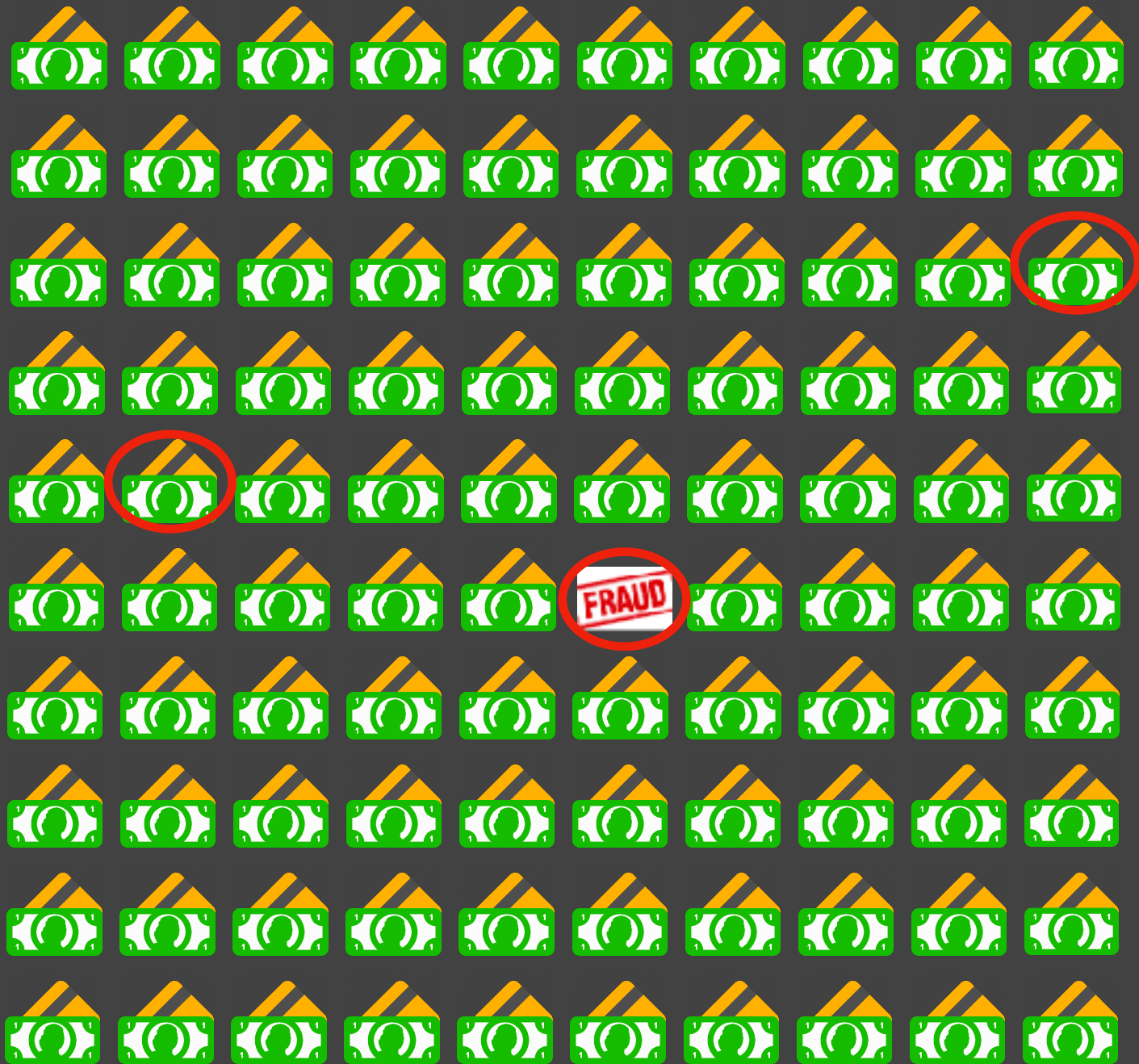
1

Pred Neg

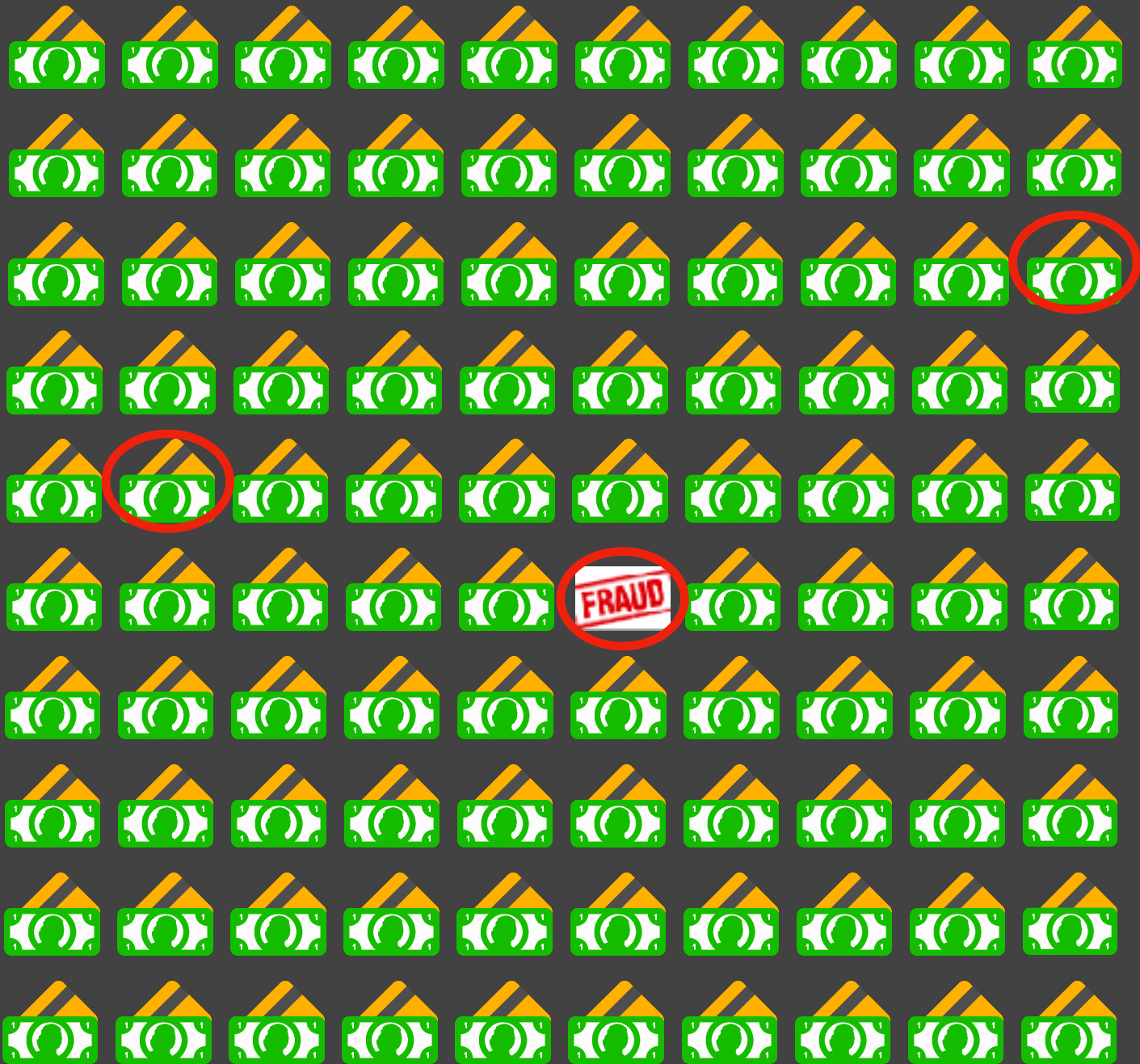
Pred Pos

Precision

33%



Recall



## Confusion Matrix

True Neg

97

2

True Pos

0

1

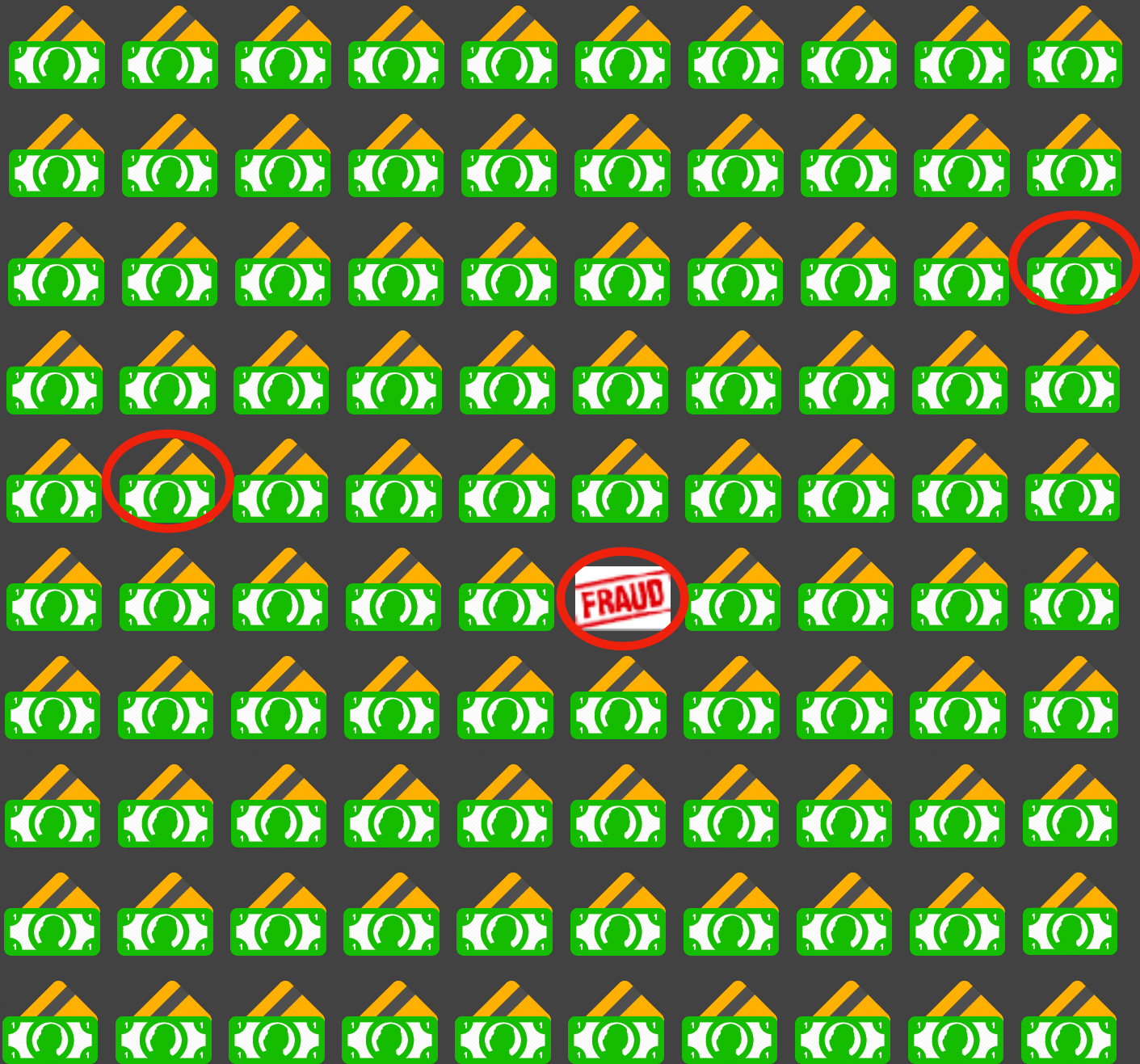
Pred Neg

Pred Pos

Precision

Recall

33%



## Confusion Matrix

True Neg

97

2

True Pos

0

1

Pred Neg

Pred Pos

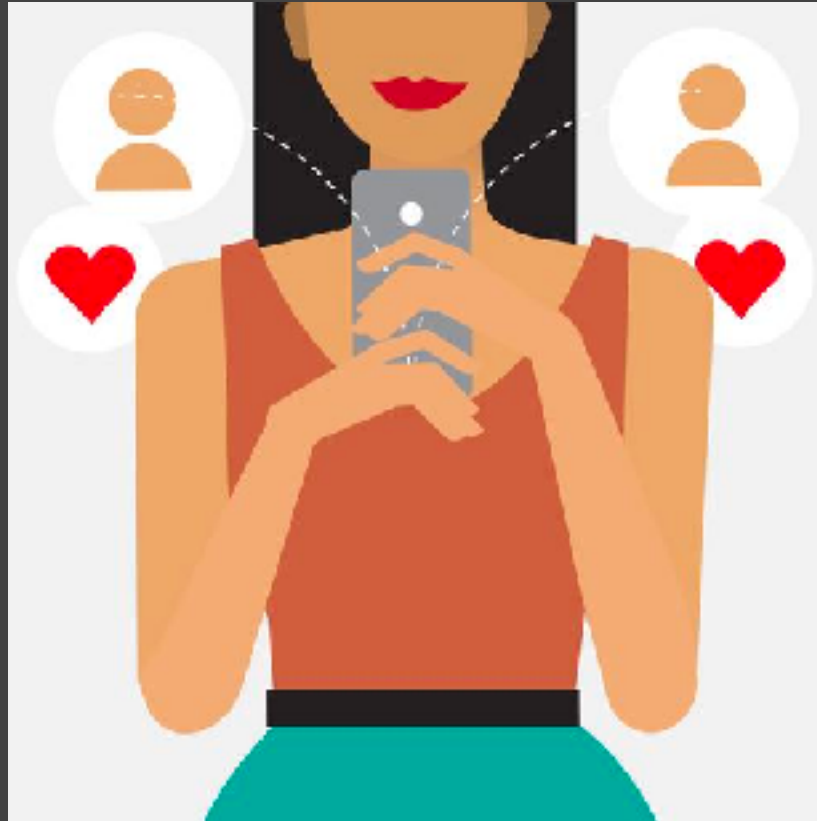
Precision

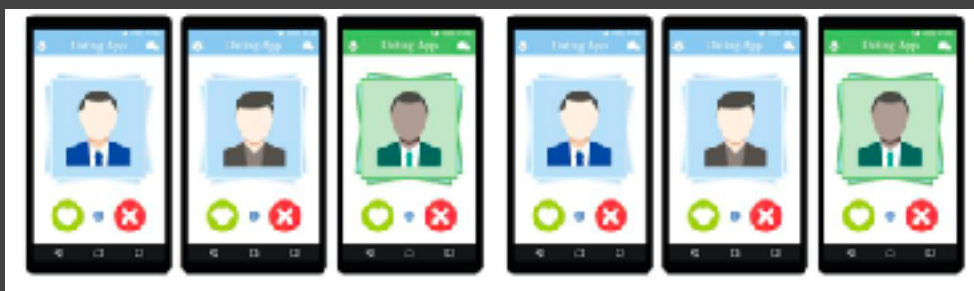
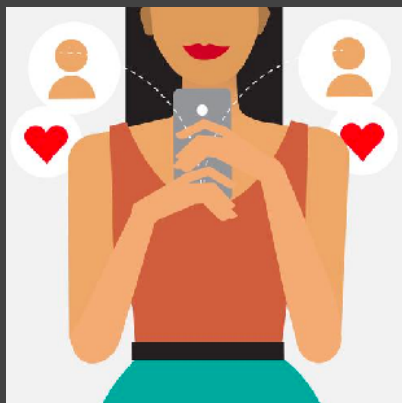
Recall

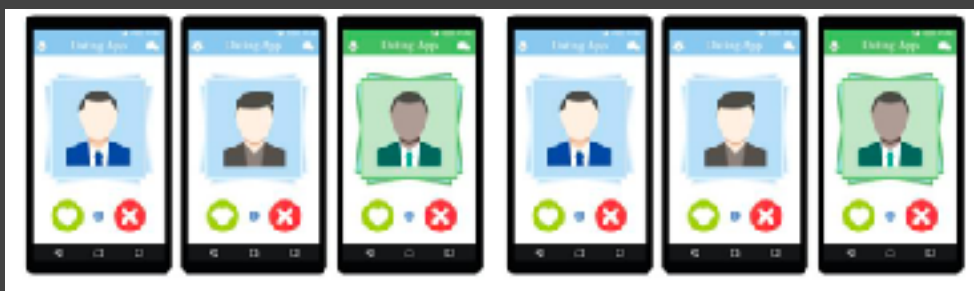
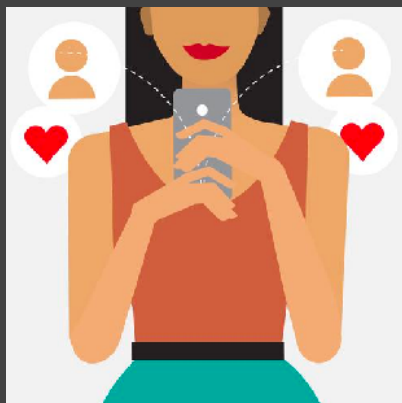
33%

100%

# Dating App





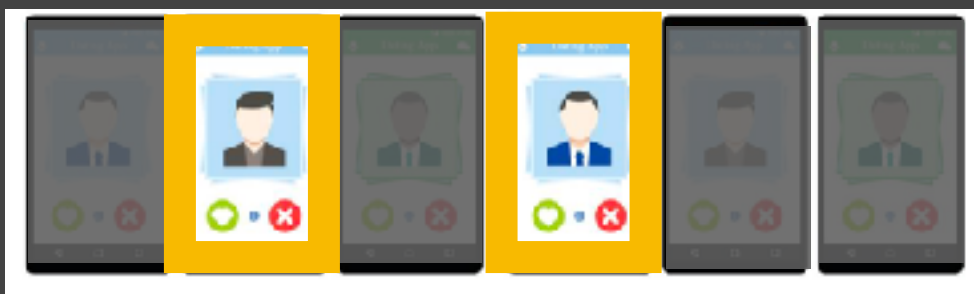
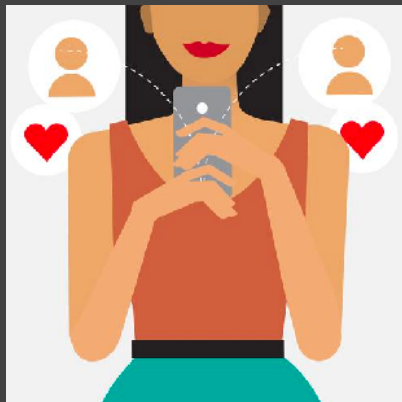


Match



Match Match





Match



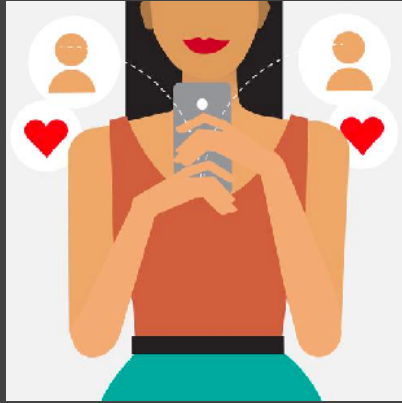
Match



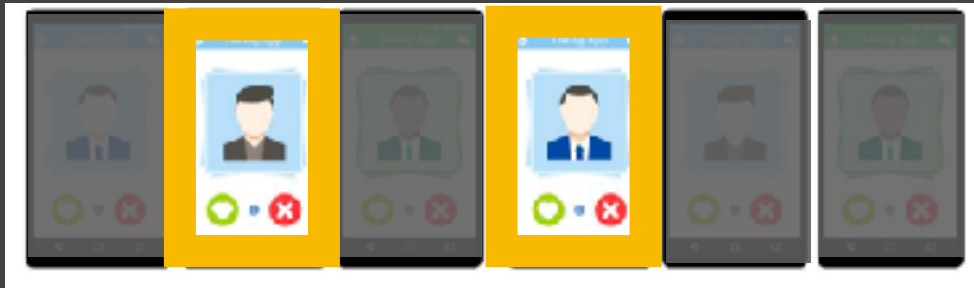
Match







Recall



Match

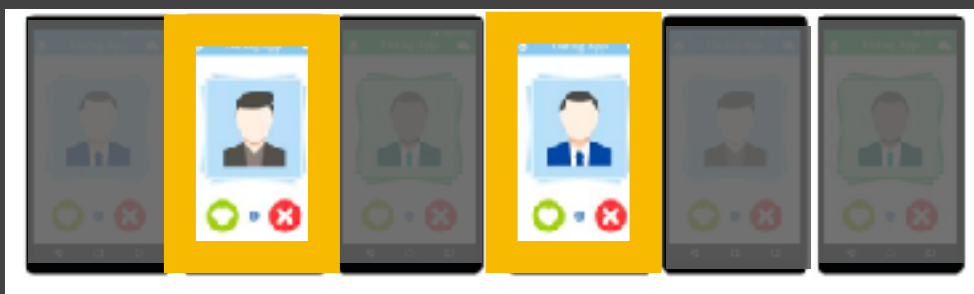
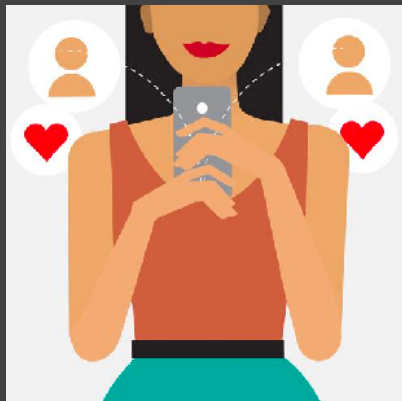


Match



Match





Match



Match



Match



## Confusion Matrix

True Neg

2

1

True Pos

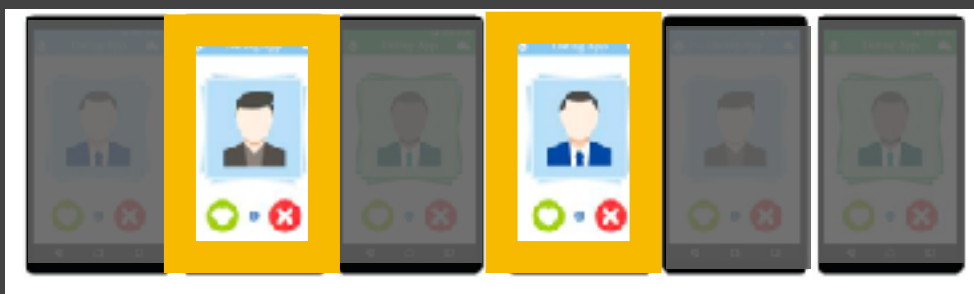
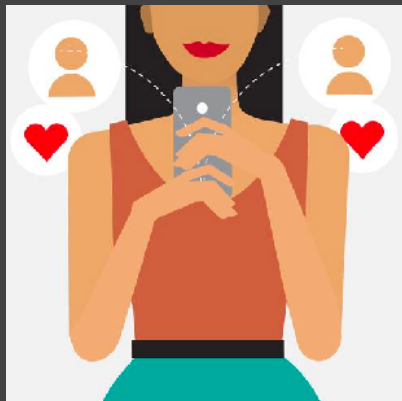
2

1

Pred Neg

Pred Pos

	Recall



Match



Match



Match



## Confusion Matrix

True Neg

2

1

True Pos

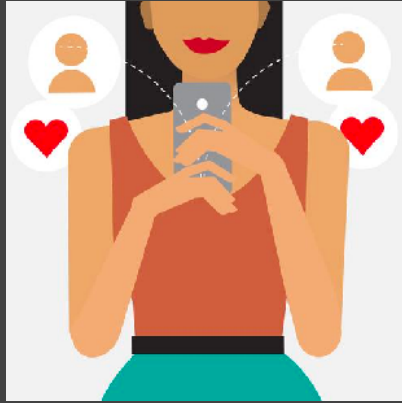
2

1

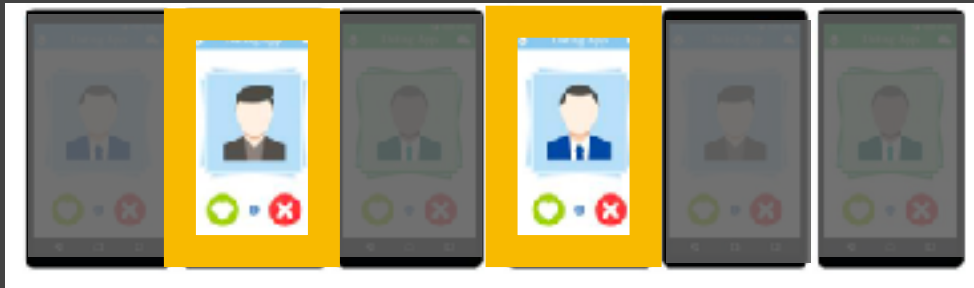
Pred Neg

Pred Pos

	Recall
	33%



Precision



Match

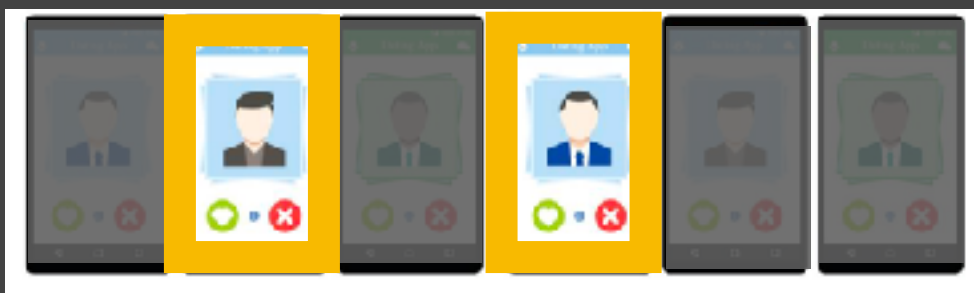
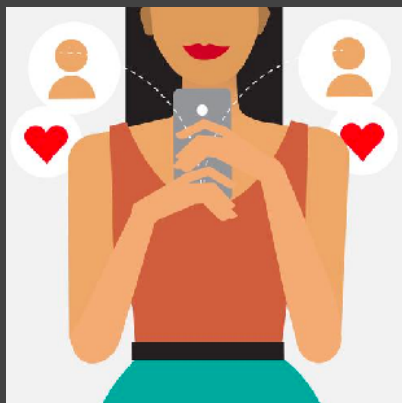


Match



Match





Match



Match



Match



## Confusion Matrix

True Neg

2

1

True Pos

2

1

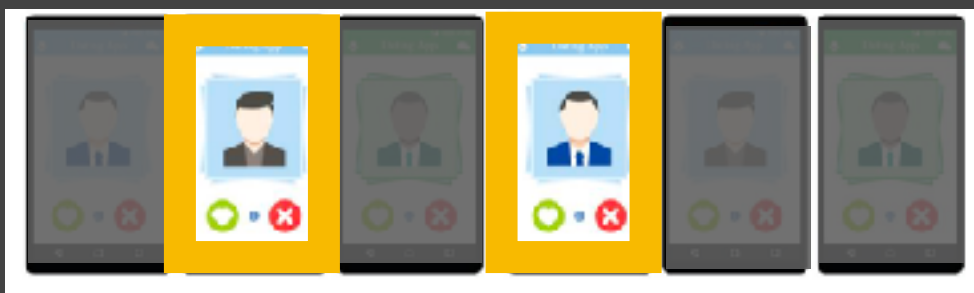
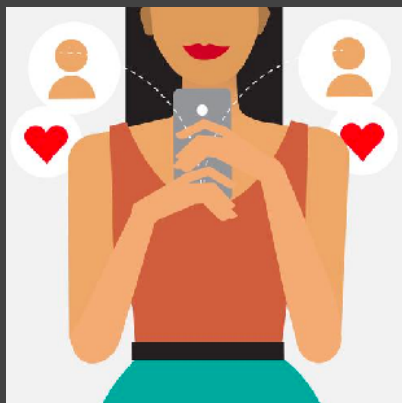
Pred Neg

Pred Pos

Precision

Recall

33%



Match



Match



Match



## Confusion Matrix

True Neg

2

1

True Pos

2

1

Pred Neg

Pred Pos

Precision

Recall

50%

33%