

# *Anonymizing* Videos & Accuracy *Prediction*

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# NCCA Problem

- Assessments based on videos
- GDPR
- Preserve minors of age identity
- Biased Marking

# NCCA Solution

Blur Faces on  
videos

# Research

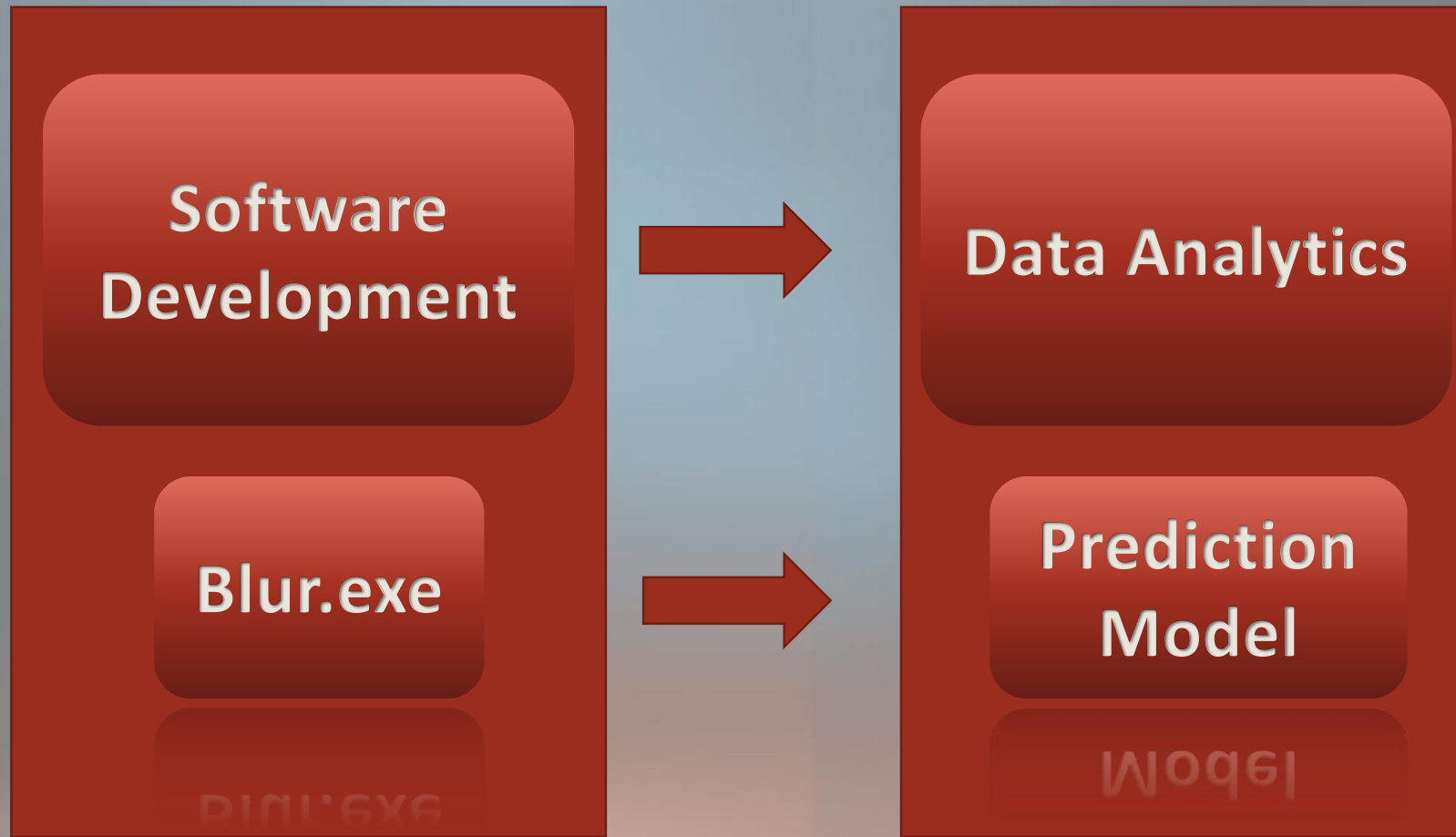
End Year  
Project

- Biased Marking
- Preserve minors of age identity

videos

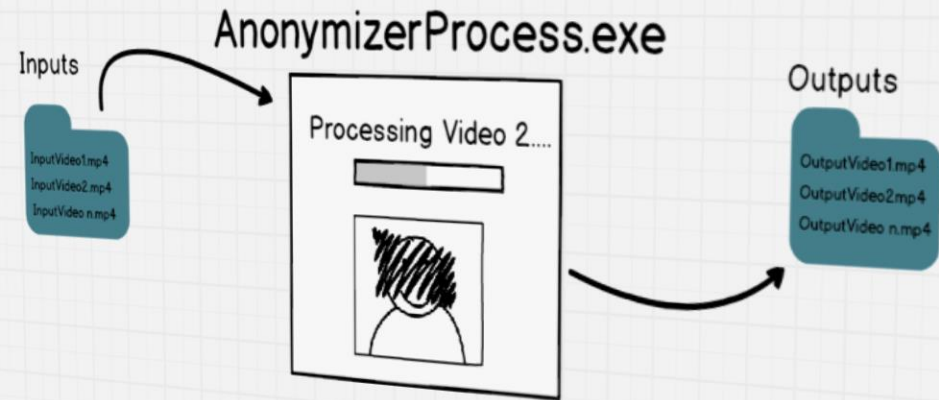
Project

# How do we solve this problem?



# Integration

1



2



# 1<sup>st</sup> Phase

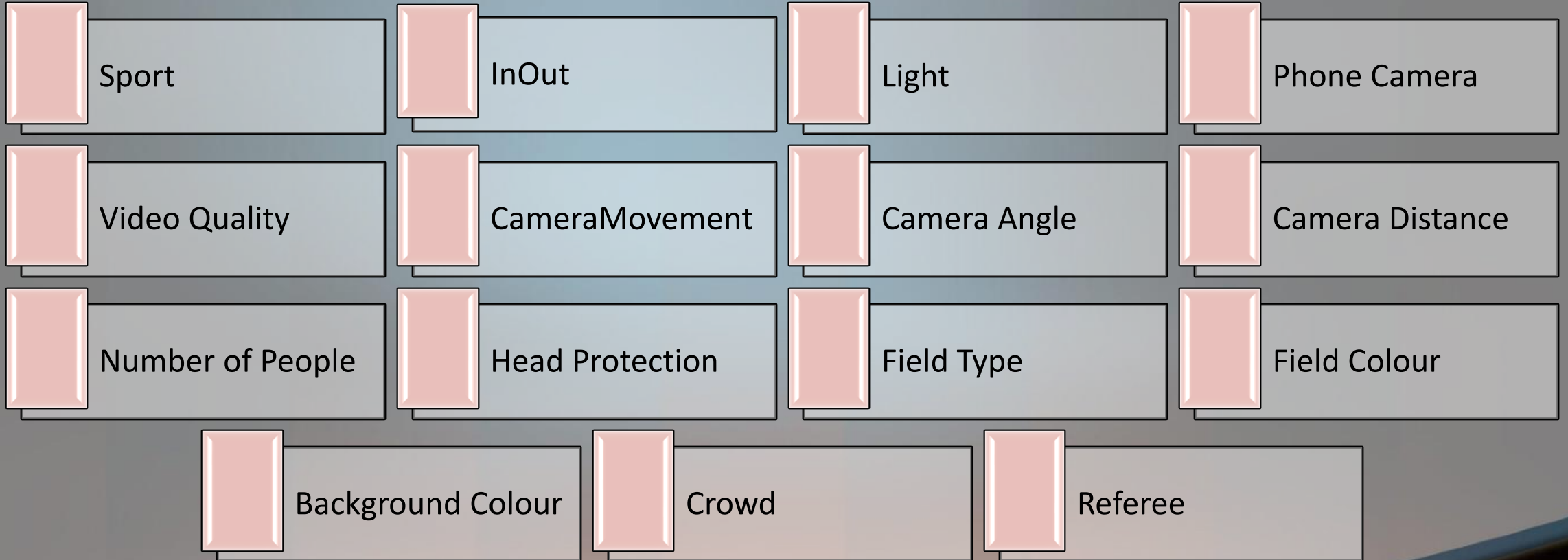




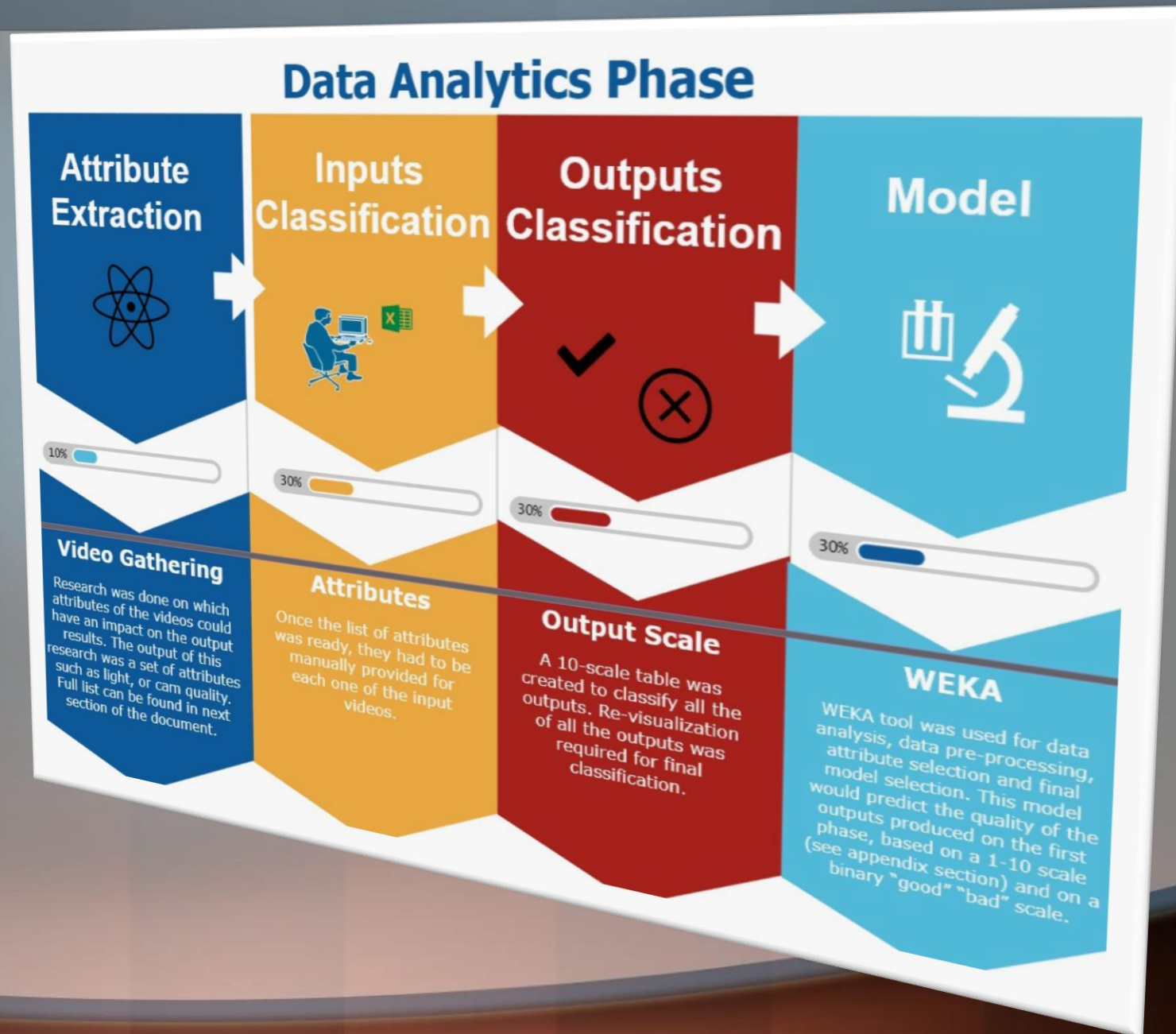
# Sports



# Video Attributes



## 2<sup>nd</sup> Phase





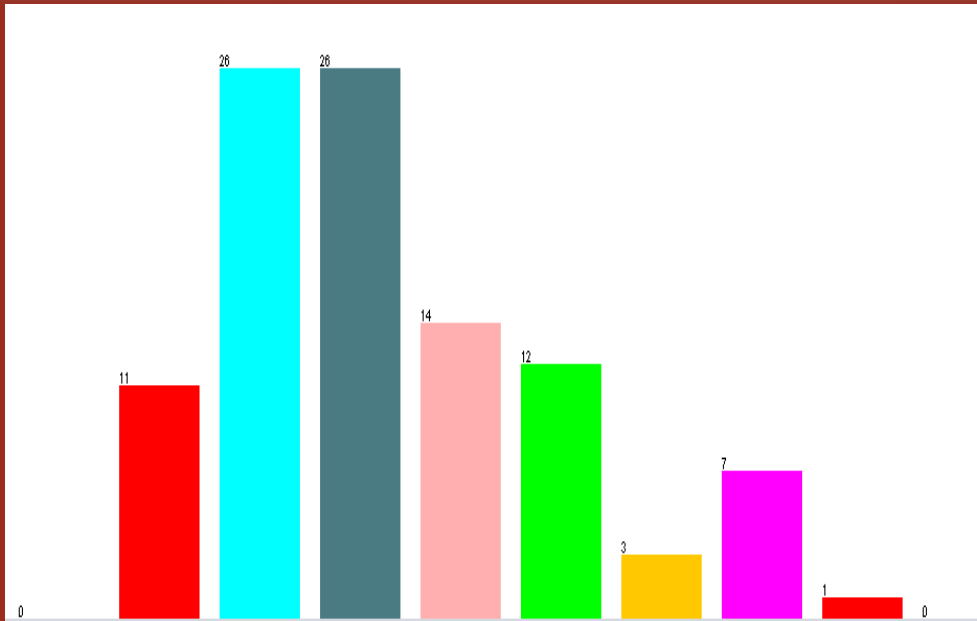
# Difficulties / Constraints / Risks

Manual Video  
Classification

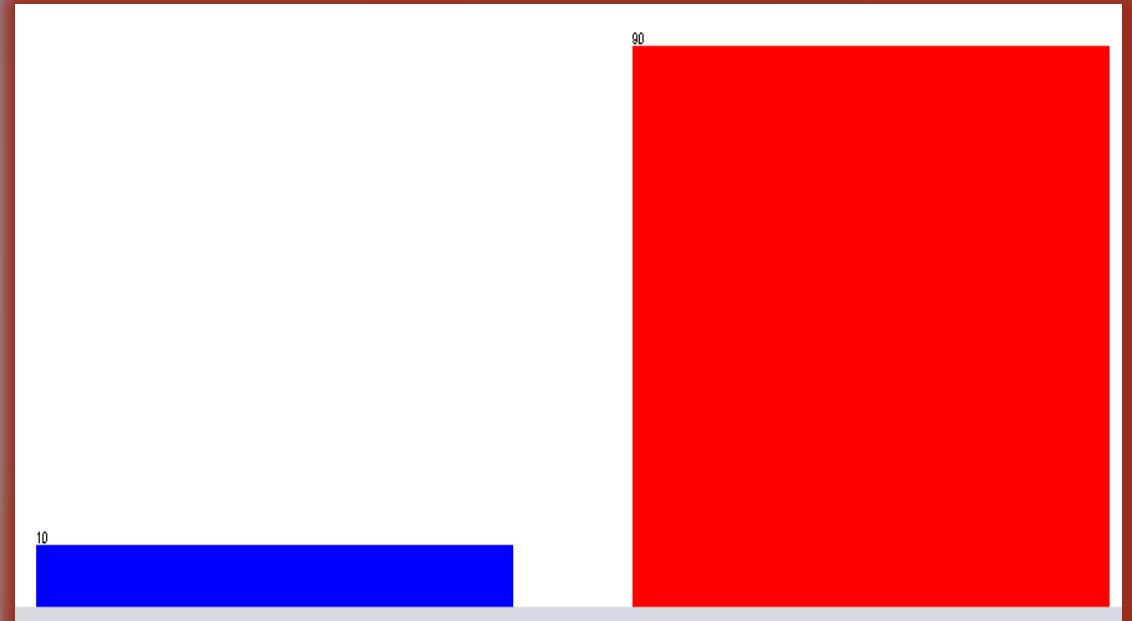
Video  
Accuracy

Blurring  
Processing  
Time

# Model development – 2 Scales



10-scale output



2-scale output

# Model Results

## Attribute set 1

In-out  
Camera Angle  
Camera Distance  
People Number  
Crowd  
Referee

## Attribute set 2

In-out  
Camera Angle  
Camera Distance  
People Number  
Crowd  
Referee

Attribute Set	Algorithm	Accuracy	Sensitivity	Specificity
1	Naïve Bayes	91%	100%	90%
1	Trees.J48	89%	30%	95.5%
2	Naïve Bayes	94%	90%	94.4%

# Summary

## Findings

- Library limitations
- Relevant attributes

## Recommendations

- Investigate other libraries
- Improvements or tips to boost accuracy