



Research Proposal

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Agenda

Project Title

Research Topic

The Methodology

Cyberbullying

Artificial Intelligence

Chatbot


Ethical and Risk Consideration

Artefacts

Timeline

Future Work





Can Machine Learning Reduce and Educate Users on Cyberbullying



Identify cyberbullying messages or images before they are received by a user

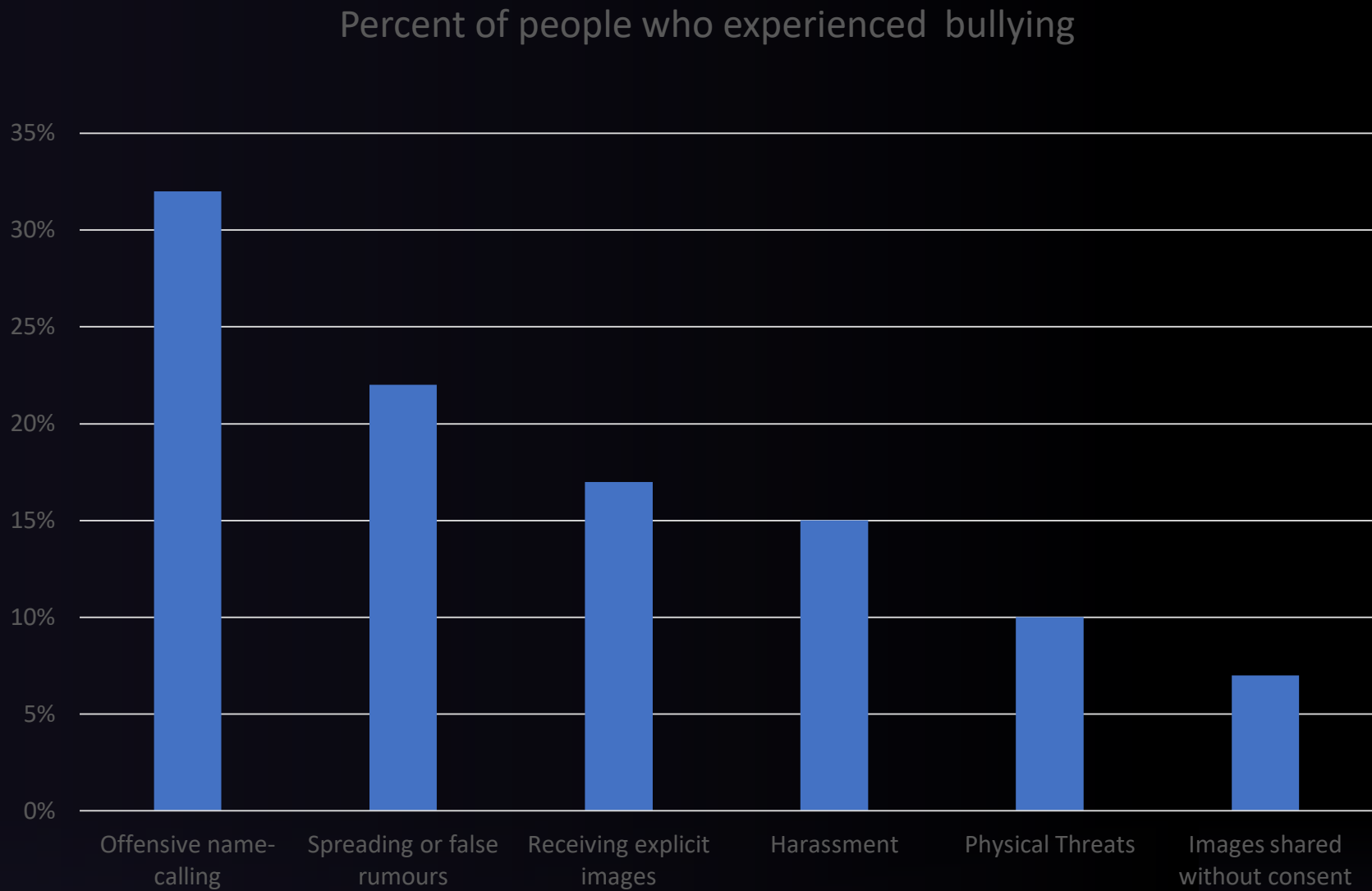
Warn and Educate users who are sending the messages of the impact

Alert

Methodology

- Quantitative
- Human, Organisational & Regulatory

Cyberbullying (Anderson, 2018)



Cyberbullying

- 76% for 8 – 11-years old
- 71% for 12 – 15-year-old
- 39% of 8 – 17-year-old said they have been bullied both on-line and face to face
- Common form of bullying was
- Text or Messaging app 56%
- Social media 43%

(Ofcom, 2022)

Cyberbullying

- Harassment 45%
- Trolling – 36 %
- Cyber Stalking 33%
- Accounts Hacked 31%
- Brigading 30%
- Virtual Mobbing 24%
- Physical sexual violence 24%

(Cook, 2018)

Artificial Intelligence

- Logistic regression
- Decision trees
- Random Forest
- Support Vector Machines (SVM)
- K-Nearest Neighbours (KNN)
- Neural networks,
- (Hamiza Wan Ali, Mohd and Fauzi, 2018 -Khurram, 2023 -Panch, Szolovits and Atun, 2018 Sandya Venu et al., 2023)

Chat Bot

- Tree-Based
- Artificial Intelligence (AI)
- Hybrid
- (Haristiani, 2019, - Caldarini, Jaf and McGarry, 2022)



Ethical and Risk Consideration

- Bias
- Learning
- Privacy Concerns
- Complexity
- (Milosevic, Van Royen and Davis, 2022)

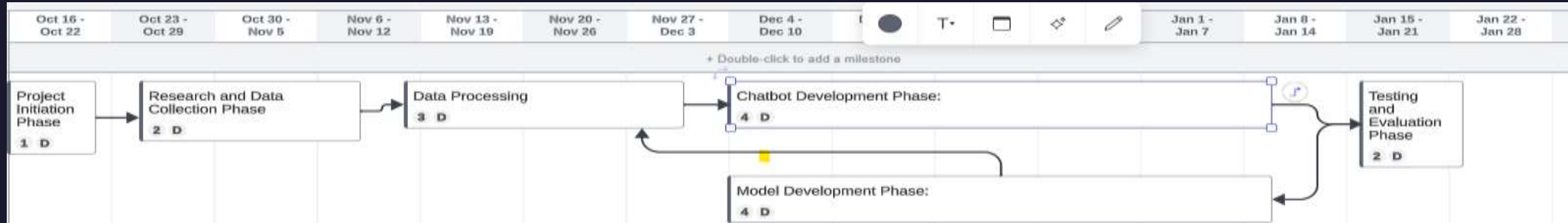


Artefacts

- Front End
- Back End
- Libraries
- WebSocket
- Database



TimeLine



- Project Initiation
- Research and Data Collection
- Data Processing
- Model Development
- Development
- Testing



Future Work

Thank You

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