

## Introduction

How can we best support youth empowerment in algorithmic systems?

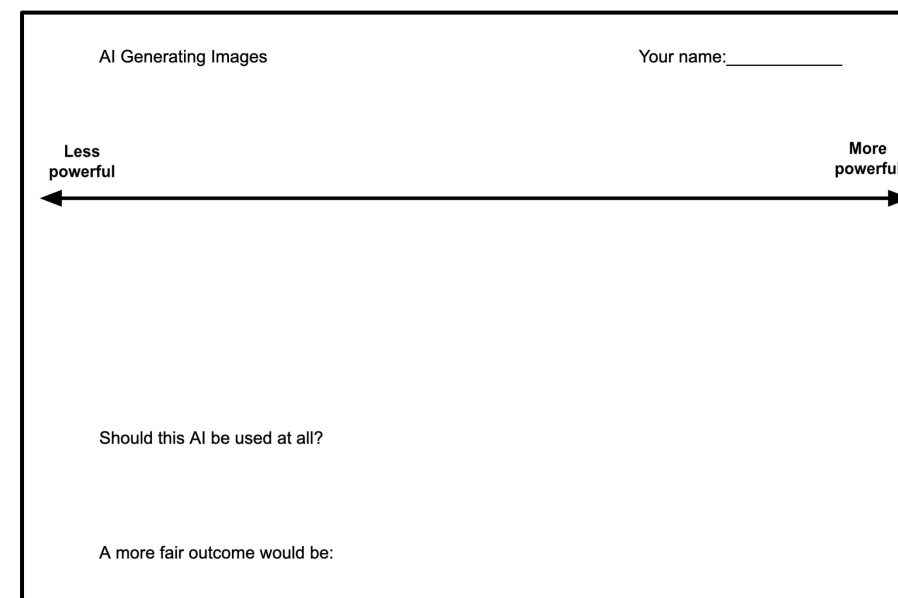
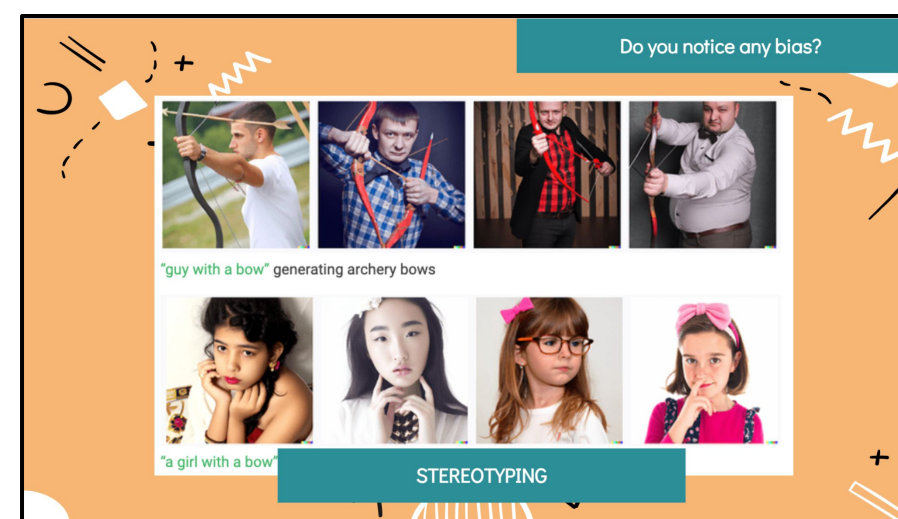
- **Understanding:** Supporting youth through scaffolding youth ideation of fair AI outcomes in educational workshops
- **Control:** Supporting youth through ideating systems for youth involvement in responsible AI based on youth-designed features

## Methodology

### Educational Workshop Format

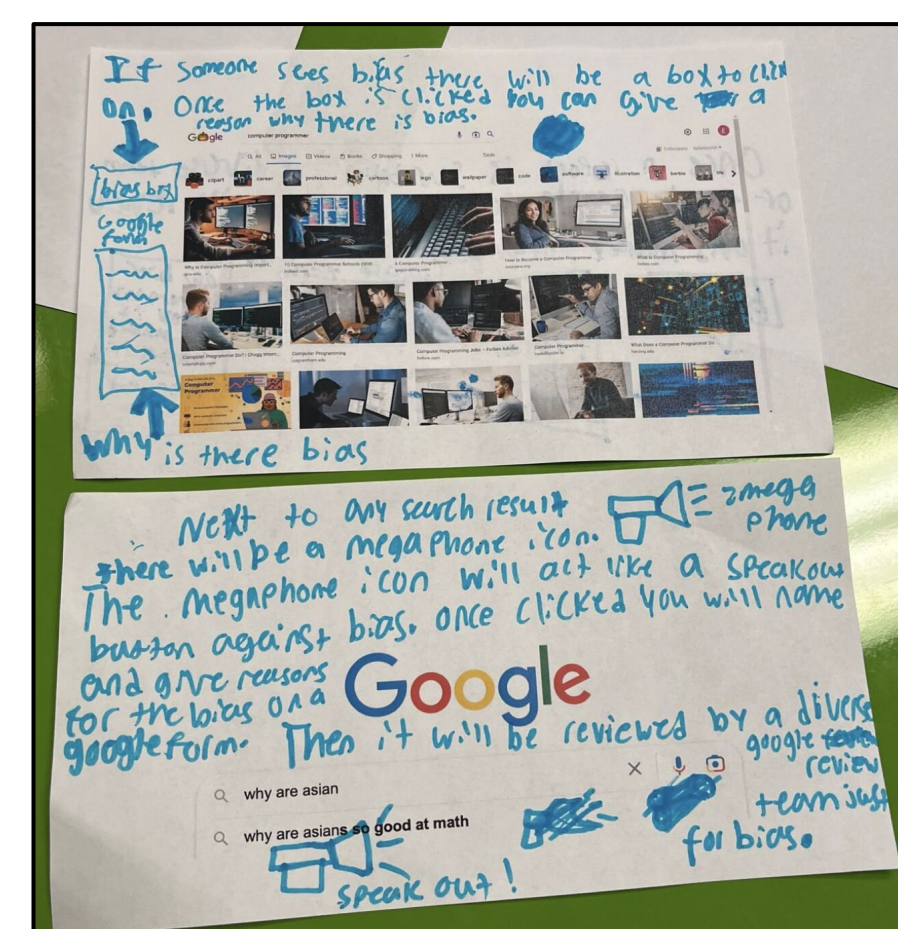
Topics
What is AI?
What is fairness?
Connecting AI & Fairness
Bias in AI
Stakeholders
Power
Fairer Future

### Example Materials



### Youth-Inclusive Feature Ideation

- Ran a co-design workshop where youth re-designed systems
- Investigated how these features connect to ideations of fairness
- Created designs for systems based on these features

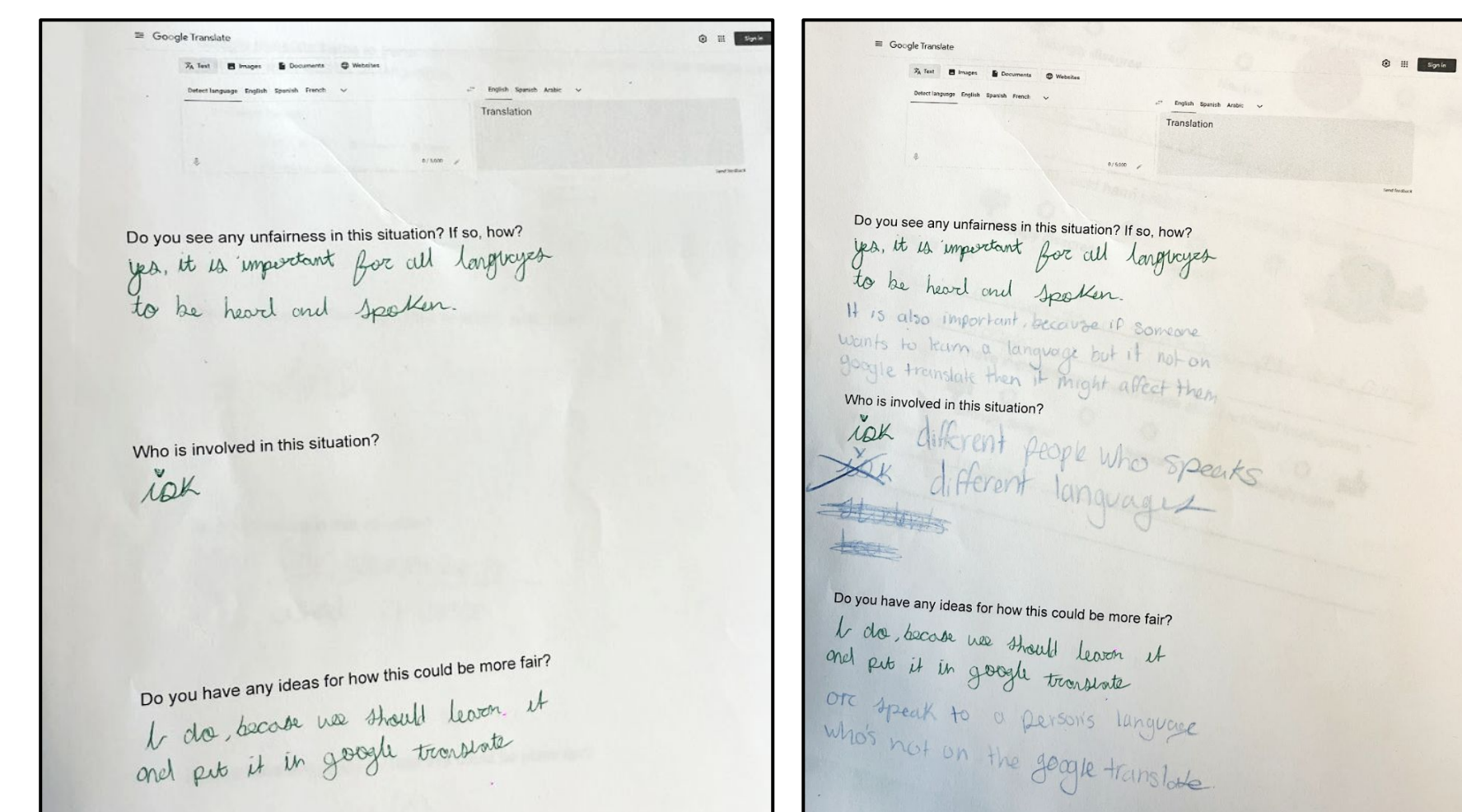


## Results

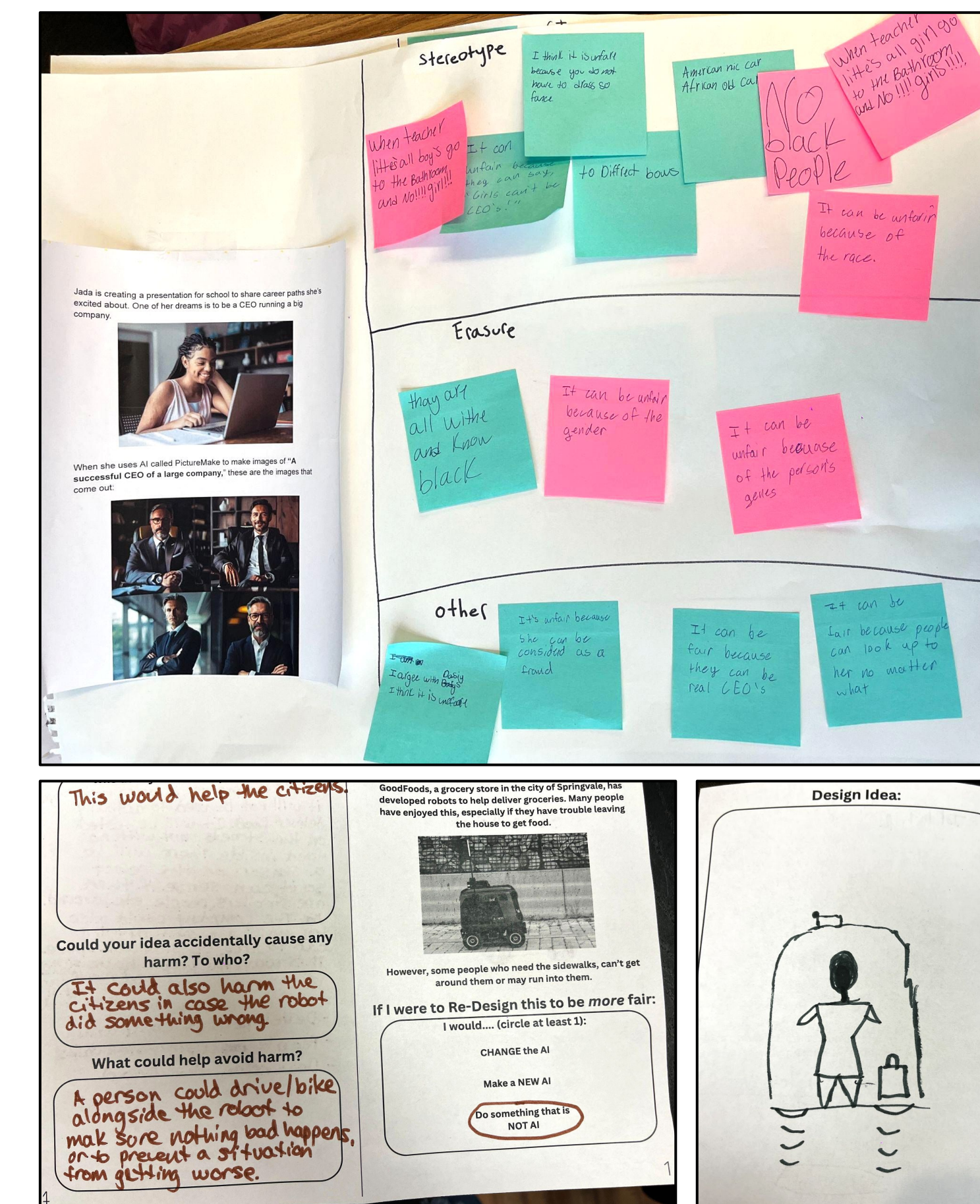
### Educational Workshop

#### Workshop Sessions

- **6 workshops** + 1 pilot session
- **28 total unique learners** (not including pilot)
- Late elementary to middle school students
- Assessed knowledge & attitudes in pre/post tests



Pre/Post test example



Identifying bias (top) and redesign (bottom) activities

### Preliminary Findings

Students were able to...

Define fairness and bias

Identify stakeholders

Ideate ways to empower stakeholders with less power

Come up with policies and designs for fairer AI systems.

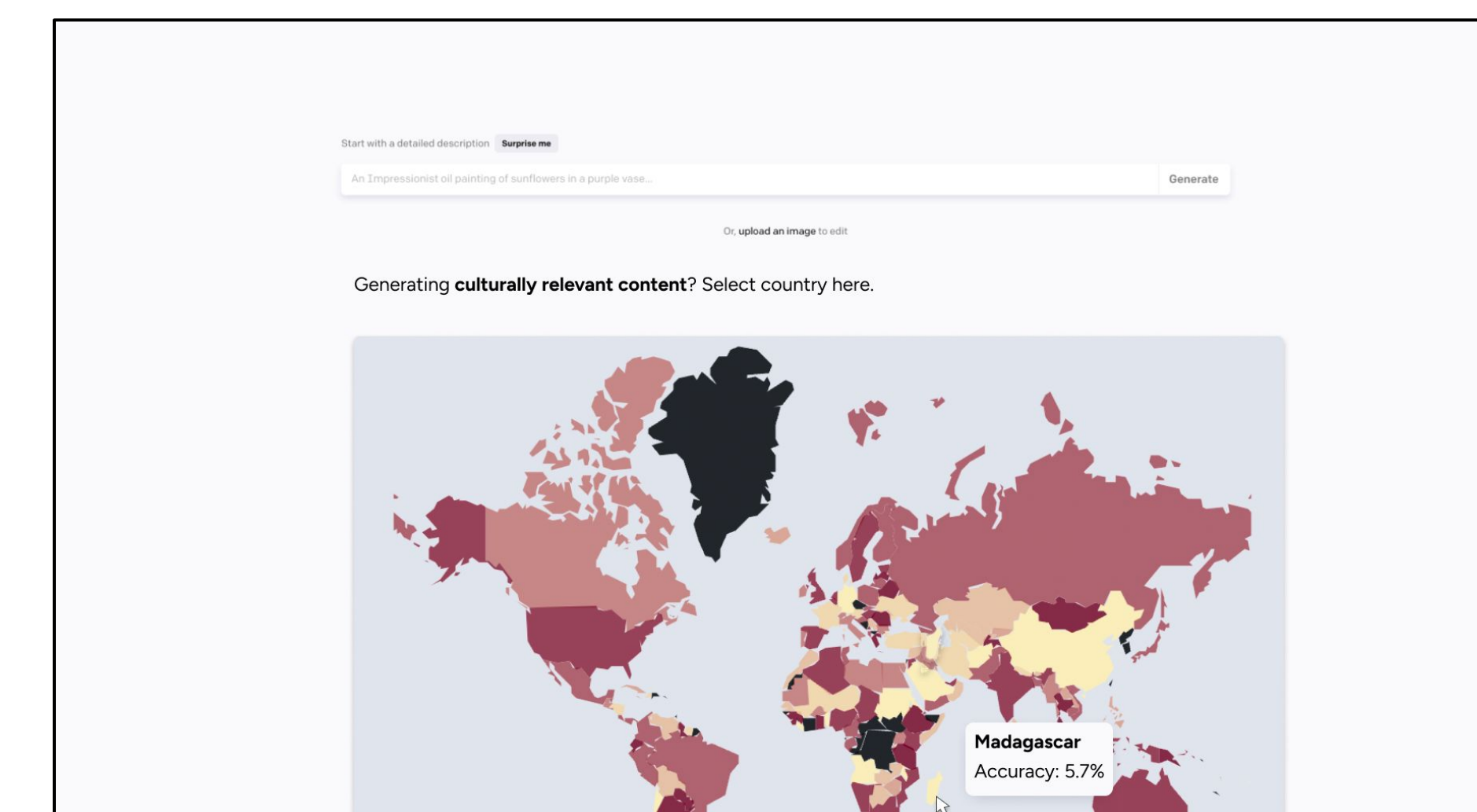
## Discussion

- Builds on previous work to show that middle-school children can not only recognize bias but **think of fairer outcomes** and **policies to achieve those outcomes**.
- Extends work done around teaching how middle-school students can recognize **power dynamics between stakeholders** in algorithmic systems..
- Combines research around youth-friendly digital systems with features youth created themselves to **support youth participation in responsible AI**

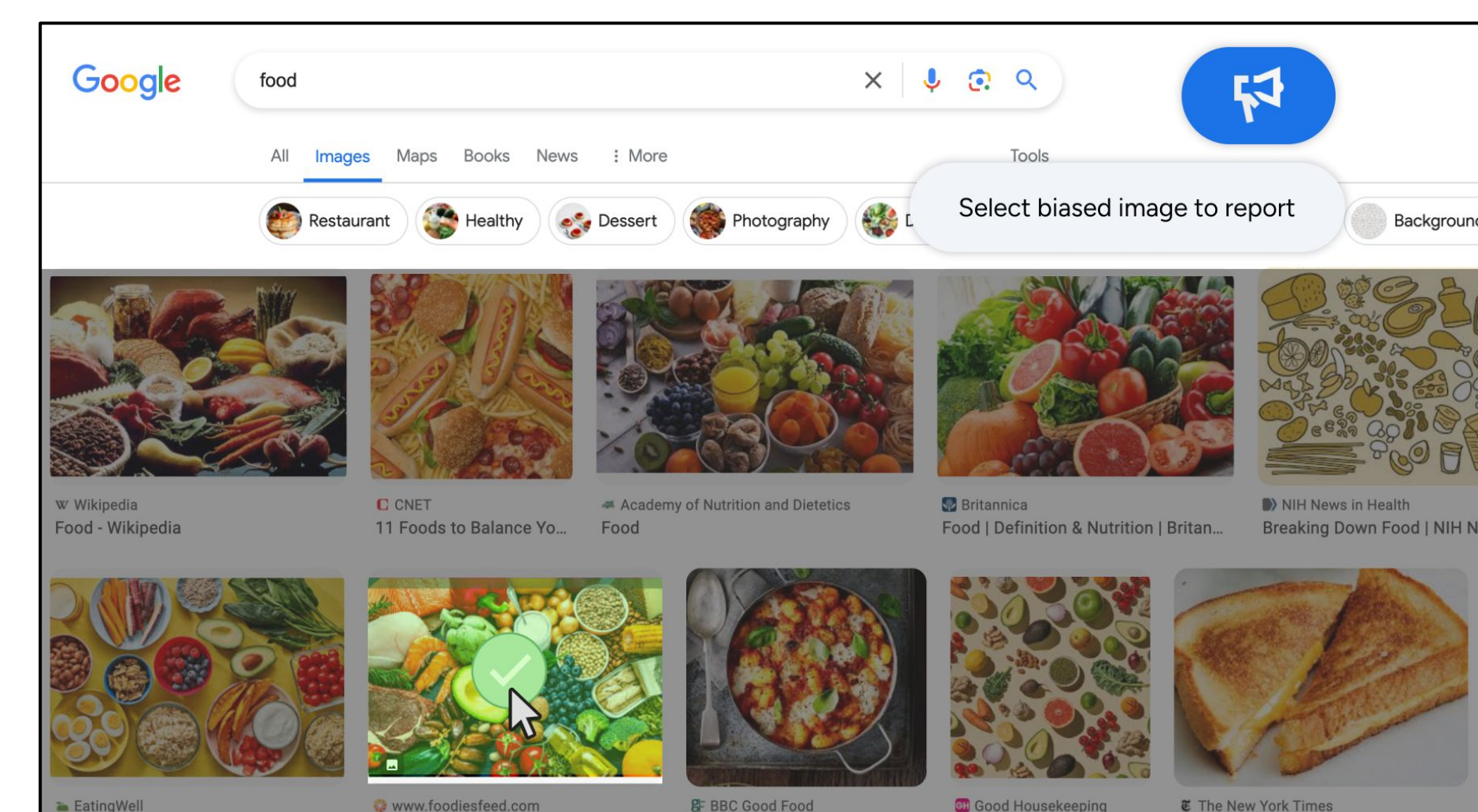
### Youth-Inclusive Features

**Theme:** fairness through adding diversity

**Solution 1:** Personalization



**Solution 2:** Protest



## Future Work

- Continuing running sessions & follow-up sessions with youth
- Prototyping of youth-ideated systems and testing with youth