# **Tragedy of The Commons**

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## **Description of the Problem**

- We are not living in a sustainable society humans are exploiting natural resources for selfish reasons at the expense of our ecosystem
- This behavior is described by the Tragedy of the Commons
- We want to create an interactive game that explains the Tragedy of the Commons through a simple overfishing example
- We want to make people more aware of the consequences of their actions

#### **Related Work**

- The Evolution of Trust Game
- Explorable Explanations have been made on games
- The Tragedy of the Commons has been introduced to kids as a <u>fishing</u> game in classrooms:
- Tragedy of Commons Explanation
- Fisheries are a common example
- Formal model
- Formal model better explained

#### Three parts to the Exploration Explanation:

- 1. Initial Game where user is asked to harvest as many fish as he/she would like from the pond (without explaining Tragedy of the Commons)
- 2. We explain the Tragedy of the Commons
- 3. Users play another round of the game, where we introduce utility scores so that players can make more informed decisions

## Demo

### Tasks for this Project

- Formulate the Game Theory for the Initial Game and the Follow-Up
  Game (understanding what happens with each possible input)
- Write the text for both games, as well as the explanation of the Tragedy of the Commons
- Build the React App
- Use D3 to animate the fishing