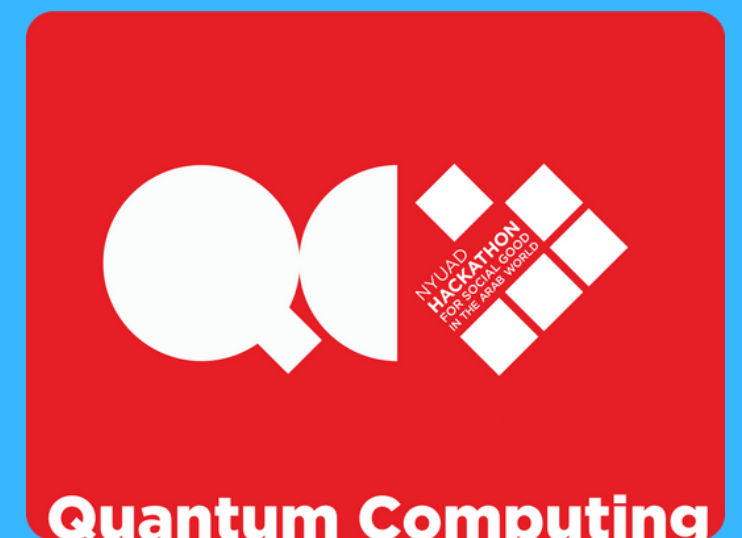


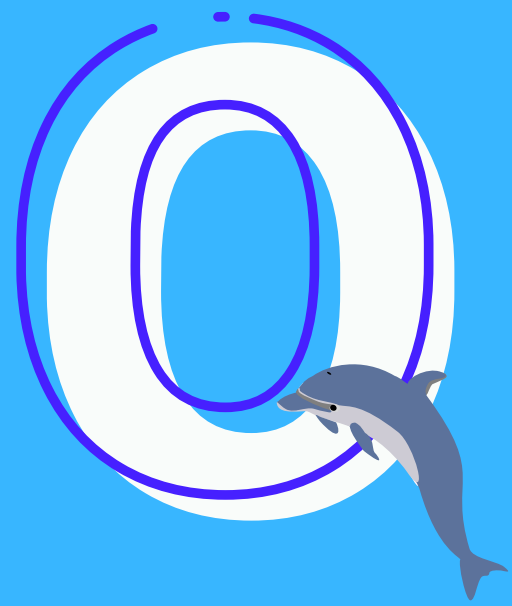
Spill Savers

مُوفّر الإنسكابات

LESS SPILL, MORE NATURE

TEAM - 1Q: <https://github.com/arnabgho/NYUAD-2022>

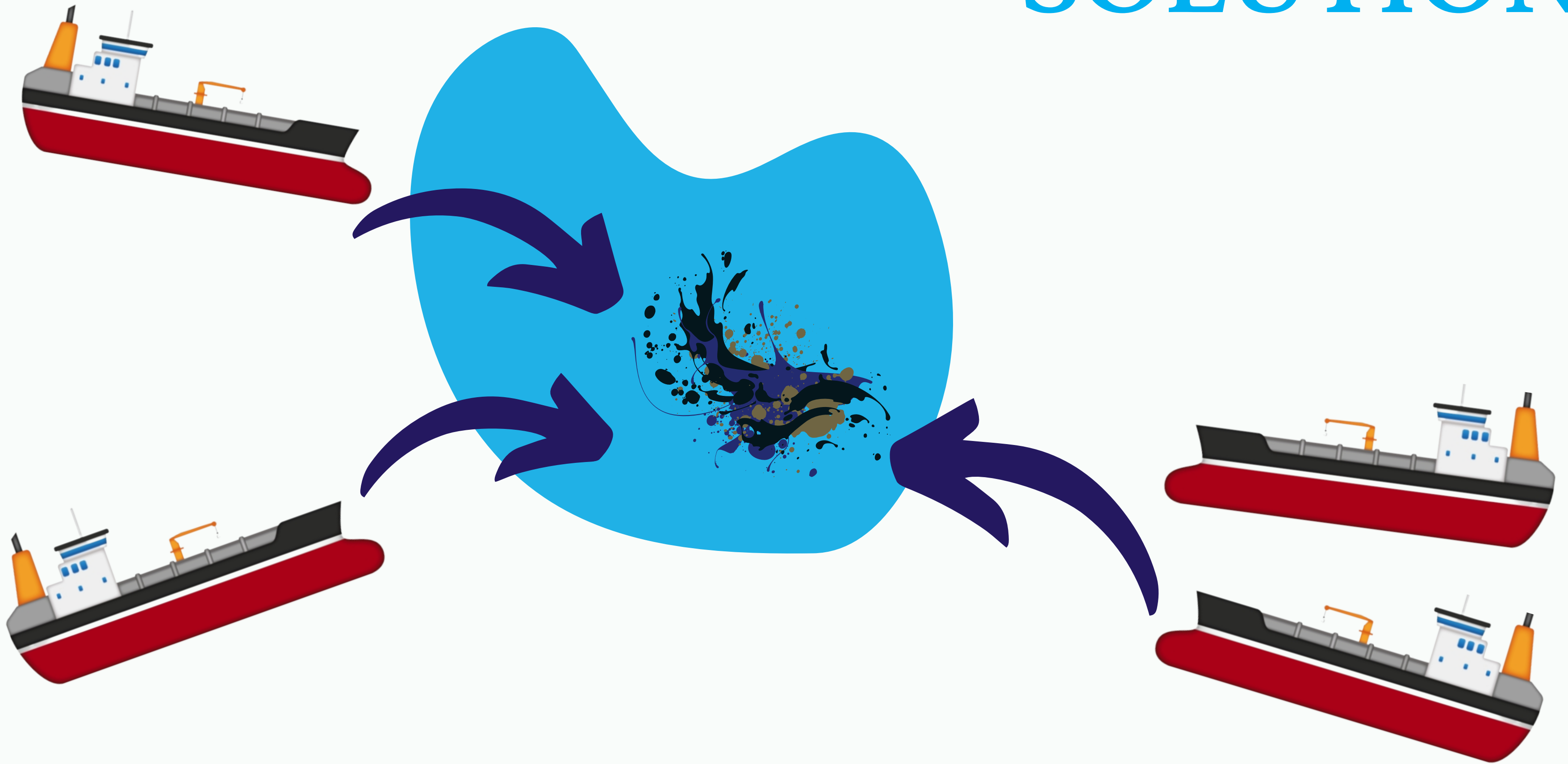




**"380 million gallons of petroleum
oil spill occurs in the sea annually."**



SOLUTION



Minimize the resources

Maximize the nature

Optimal resource allocation with **QUBO/QAOA**

Linear programming

Implemented in **Qiskit**

Suitable for **D-Wave**

```
\ This file has been generated by D0cplex
```

```
\ ENCODING=ISO-8859-1
```

```
\Problem name: oil spill
```

```
Minimize
```

```
obj: 810.369051728902 ship1 + 926.002159824695 ship2 +  
892.637664452940 ship3
```

```
Subject To
```

```
lin_eq: 5 ship1 + 10 ship2 + 5 ship3 >= 20
```

```
Bounds
```

```
0 <= ship1 <= 1
```

```
0 <= ship2 <= 1
```

```
0 <= ship3 <= 1
```

```
Binaries
```

```
ship1 ship2 ship3
```

```
End
```



DEMO

What's Next?

A blue rectangular tag with rounded corners and four white circular punch holes at the corners. The word "Global" is centered on the tag in a dark blue serif font.

Global

A blue rectangular tag with rounded corners and four white circular punch holes at the corners. The word "Scaling" is centered on the tag in a dark blue serif font.

Scaling

A blue rectangular tag with rounded corners and four white circular punch holes at the corners. The word "Environment" is centered on the tag in a dark blue serif font.

Environment

Team Info



Mashrafi Mohammad Monon, NYUAD, Bangladesh, mmm9886@nyu.edu

Yeseon Kim, NYU, sophomore, South Korea, yk2384@nyu.edu

Stefan Hillmich, Johannes Kepler University, mentor, Austria, stefan.hillmich@jku.at

Chunting Liu, NYUAD, Sophomore, Taiwan, cl5503@nyu.edu

Ulviye Karya Ellibeş, Maltepe University, junior, Turkey, ukaryaellibes@gmail.com

Arnab Ghosh, Snapchat, mentor, India, arnabghosh93@gmail.com

Binaya Raj, NYUAD, Junior, Nepal, raj.binaya@nyu.edu

Cilina Itani, Lebanese International University, Senior, Lebanon, cilinitani@hotmail.com