# Computer Science 3A – CSC3A/CSC03A3 Mini project presentation

201595851 MG Sumba

Academy of Computer Science and Software Engineering
University of Johannesburg



# **UN Sustainable Development Goals**

Goals 9: Industry Innovation and Infrastructure

- This mini project focuses on Universal Access to Information and Telecommunication Technology in African countries.
- African countries establish partnership with one anther to help improve the internet penetration percentage of their respective population.
- The growth of internet penetration is calculated from December 2000 to the current year.

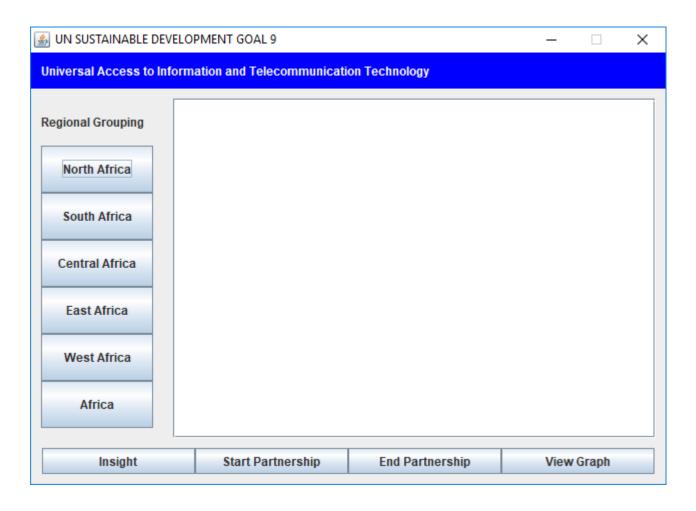
- Penetration is calculated by subtracting the internet users percentage(number of internet users / current population) and the internet users percentage in the year 2000.
- Partnership can be established by regional grouping or the entire continent.
- The application provides insight on how different countries are doing and help in calculating the internet penetration percentage and suggesting potential partners for a given country.

- For each country the following information will be displayed to provide insight:
- Country ISO code (e.g: ZAF for South Africa)
- Country name
- Region (e.g: Central Africa)
- Population
- Number of internet users in December 2000
- Number of internet users to date
- Internet penetration percentage

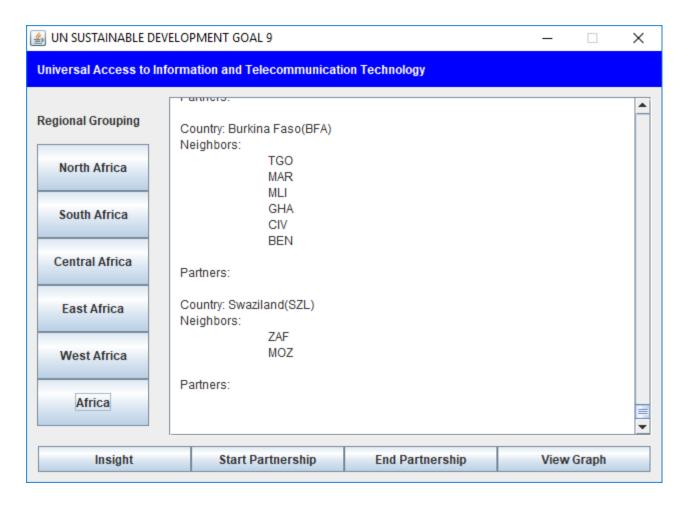
- Neighbors
- Partners, and
- Potential Partners

• Show a visual representation of partnerships between countries.

## Application starts



Select a regional grouping (Africa in this instance)

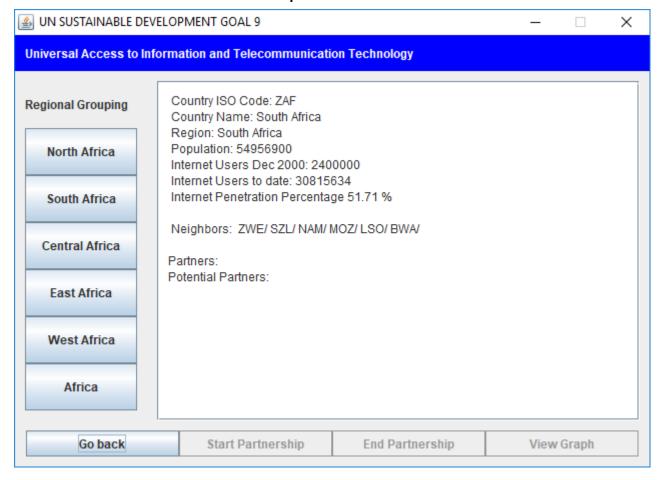


- Click on Insight button
- Enter ISO code then click OK or press enter



 Go back takes you to the previous windows

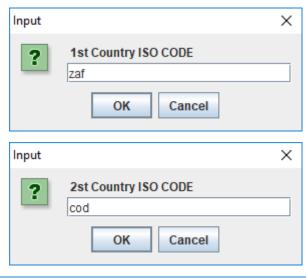
#### Output



- Click on View Graph button
- The map of Africa is displayed
- No line connecting the dots (No partnership established so far)
- Red dots represent connection points.

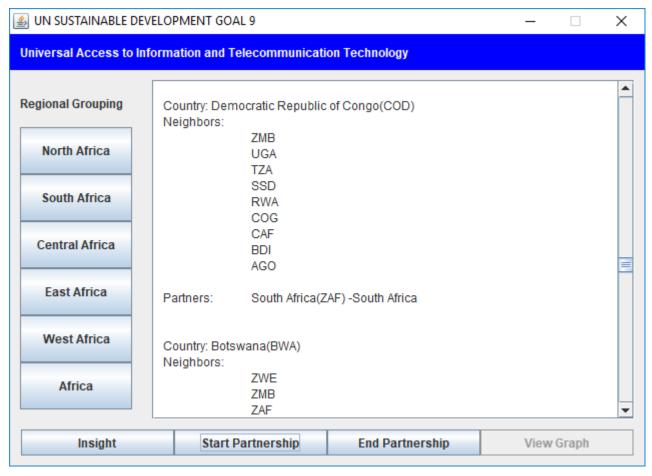


 Click Start partnership and enter countries ISO code

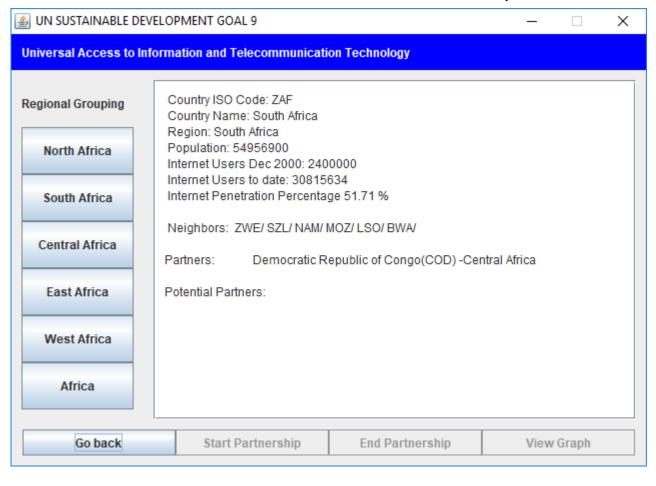




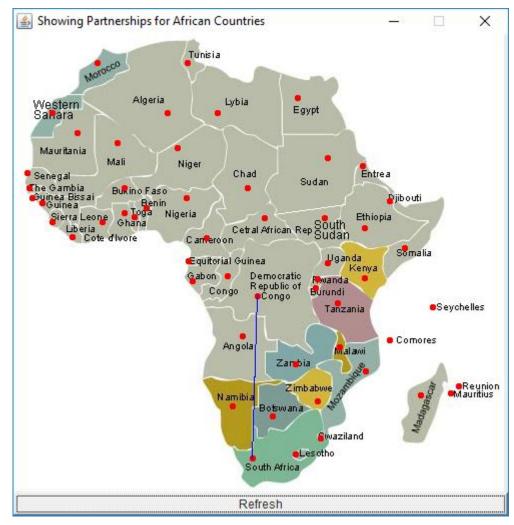
### Output after partnership has been established



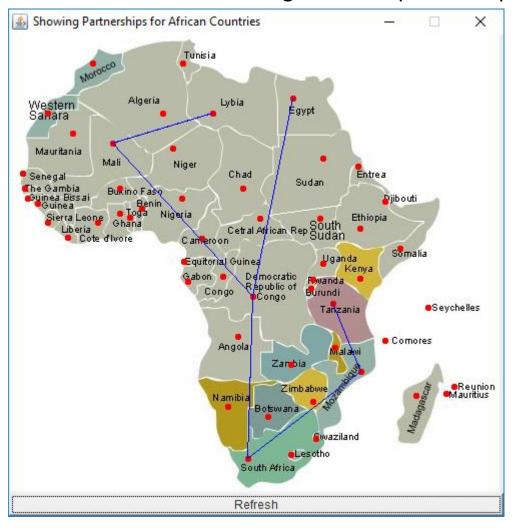
Now we can see that South Africa has one partner



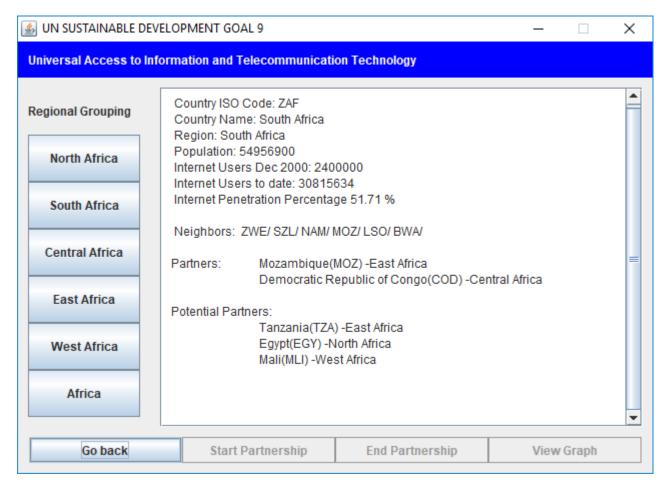
 Refresh the map and a blue line connecting the two countries is displayed



Result after establishing few more partnerships



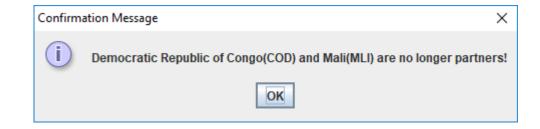
We can now see that South Africa has 2 partners
 And 3 potential partners suggested by the application
 This potential partners are partners of South African partners











- Click End partnership and enter ISO code in the prompts to end partnership between two countries
- In this instance we want to end partnership between The Democratic Republic of Congo(COD) and Mali(MLI)

Hit refresh button and we can see that
 Mali and DR. Congo are no longer partners

