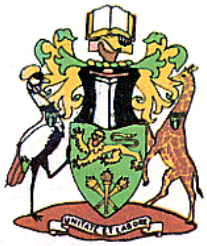

UNIVERSITY OF NAIROBI

COURSE TITLE: BACHELOR OF COMPUTER SCIENCE

UNIT TITLE: ARTIFICIAL INTELLIGENCE

UNIT CODE: CSC 215

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REG NO. : P15/44945/2017

TASK: ARTIFICIAL INTELLIGENCE REPORT

PROJECT NUMBER: 52

PROJECT TITLE: PROGRAM TO PLAN CHIROMO ROUTES

Python program that uses rules to solve issues regarding directions

Abstract

Maps have basically become something we require in our day to day lives to navigate around the world. Without them, it would be a difficult world we live in to know places, for example in Kenya, where I come from. Phones have become our personal assistants in that they have goggle maps where one does not require to keep asking anyone they meet along the road about directions but they can easily access their phones and find the directions as to where they are headed. But to find some specific places or to narrow down to some specific routes, there is need to develop a map where you can be able to minimize the search scope and also give a specific route.it is therefore necessary to develop a system that is able to give you a direct route from chiromo to anywhere you want around the city center.

Problem Definition

This program will primarily focus on developing a map, which is able to narrow down the search scope from chiromo to anywhere around the city center. A person requiring to find out where they want to head, anywhere from chiromo, you will just be required to key in the starting point, which will be chiromo and the destination which will be anywhere you want to head around the city center. People will therefore have a smooth time in getting to their required destinations as they will get the exact directions they would like and this will most likely be required by students as they are the majority in that area.

Program Development

My program was developed using the python language aided by the use of conditional statements. The knowledge based systems will be accessed using rules.

Algorithm

PROGRAM TO PLAN CHIROMO ROUTES

```
Start
    if index == 1:
        if not start:
            start = click.prompt('What is your starting point?')
        start_point = router.find_point_by_name_cli(start)
        if not start_point:
            return print('Starting point not set')
        if not end:
            end = click.prompt('What is your destination?')
        end_point = router.find_point_by_name_cli(end)
        if not end_point:
            return print('Destination not set')
    elif index == 2:
        if not coords:
            coords = get_float_tuple('What is your starting point? [format="lat lon"]')
        start_point = router.find_point_by_coords(dict(lat=coords[0], lon=coords[1]))
        if not coorde:
            coorde = get_float_tuple('What is your destination? [format="lat lon"]').split(' ')
        end_point = router.find_point_by_coords(dict(lat=coorde[1], lon=coorde[1]))
    else:
```

```
        print('Invalid input')

        return

    route, _ = router.find_route(start_point, end_point)

End
```

The program is designed to be easy to run. What the user is required to do is input the url which is displayed when the code is run and just input it on the internet and it should display a map for you which is from chiromo then you just input where you want to go around the city center and it display the route to take.

How to Run

1. Open the google chrome browser
2. In the url slot,type http://127.0.0.1:5000
3. Run the program

Conclusion

This program will ensure that the users are able to key in where they are and where they want to go and they should be able to get the directions of how they are to navigate their way to the required destinations. Once is it able to be distributed to people and installed as software in their phones, it is something will become really useful in our day to day lives.