WHAT IS PROGRAMMING?

Introduction.

Television shows and films often show programmers furiously typing cryptic streams of ones and zeros on glowing screens, but modern programming isn't that mysterious.Programming is simply the act of entering instructions for the computer to perform. These instructions might crunch some numbers,modify text, look up information in files ,or communicate with other computers over the internet.All programs use basic instructions as building blocks.

In today's technologically advanced age, computer programming skills have become a necessity for everyone including students. Apart from offering distinct advantages in the career market, programming skills have many other advantages as an ordinary computer user programming is not mandatory but complementary, to run applications on a computer one doesn't need to know what the computer is doing , however a better understanding of the processes that happens inside the computer will insure better results.

Learning how to code will increase problem solving skills and analytical thinking, even simple programs can make a significant change in the skill set of a student. Computers are a good educational medium while learning programming languages which will inspire students to explore, experiment and arrive to conclusions, apart from logical thinking programming will also develop students learning behaviours. With programming students will be able to build web apps,mobile apps, software, by profession or start IT business, freelance ,teach to name a few.

Weather one learns coding as a hobby or as a career choice, it will come with infinite benefits and opportunities. Computer programmers can choose from a range of career paths, including healthcare, Research and development in various subjects like Machine learning and computational biology among others. IT sector jobs offer excellent working conditions and salary packages. Programmers also enjoy the benefit of working from home as all they need is a computer and an internet connection to do the job. High demand in computer professionals, which is expected to increase with programmers with expertise in niche areas like web applications being particular in demand. In a technology dependant world people with good computer skills will have a distinct edge over their less savvy counterparts in the job market.

Project Description

Our team would like to bring a programming clinic to our community focusing on giving young people an introduction to programming using Python,HTML,CSS,JavaScript,Dart programming languages building projects that can be used in the real world. Our country has a lot of free higher learning opportunities for young people looking to further their studies and later getting work opportunities in this field schools like **we think code** have been around for many years, free and always looking for new aspiring programmers with a simple catch of passing a few requirement tests which proves difficult to someone who has no knowledge of how programmers think and basic computer literacy. The duration of our clinic would need to be about a month to achieve our goal teaching everything from.

- basic computer skills
- Installing important software's
- introduction to programming languages Python,HTML,CSS,JavaScript and Dart
- Programming frameworks like Django, Flask, Flutter
- Working with data bases like SQL
- Building real world projects
- Testing and debugging code
- solo project

Problem statement

There's a digital divide that exists between individuals who have access to modern information and communication technology and those who lack access. Digital inequality is evident between communities living in urban areas and those living in rural settlements, between socioeconomic groups; less economically developed and more developed, the educated and uneducated population. Individuals with internet connection can be digitally split across our Community. gaps in digital inequality include:

gender divide mobile connectivity is spreading drastically but woman are still behind in low income areas with 90% of men being more likely to own a mobile phone than woman with an even lower percentage when it comes to computer literacy.

social divide the internet creates relationships and social circles among people with shared interests. Social media platforms like Instagram, Twitter and Facebook create online peer groups based on similar interests.

Education Collage degree holders are more likely to have internet and computer literacy compared to individuals with just a high school education or lower.

Income Levels The income gap plays a role in magnifying the digital divide high income earners are more likely to own a computer and have internet access at home than low income earners.

Bottom Line Our lives revolve around digital platforms we live, learn , work and play with technology a computer-literate workforce is crucial and can maximise ones opportunities it is our duty to pass on information, skills and knowledge to the youth so they can take full advantage of these opportunities.

Benefits of the Project

Programming skills aren't only important for individuals in this field and they can help develop other crucial skills needed in the work place.
- Career path opportunities.
- Free higher learning opportunities
- Freelance work opportunities.
- Skills development useful in any field.
- Computer literacy

Costs of the project

Our costs have been calculated using current market prices for all items listed below.
Laptops R5 700 x 5 = 28 500
Projector = R3 500
wifi conection R600
chairs R200 x 25 = R5 000
tables R7 000
stationary = R2 000
Total R46 600