

The Garden Route ICT Incubator proudly presents:

Amp George! Hackathon 2013

Can you code – or know someone who can?

Enter the Amp George! hackathon on Friday 22 and Saturday 23 November brought to you by the Garden Route ICT Incubator.

The challenge for the hackathon is a kiosk or mobile application to enter job seekers into a draw for the Extended Public Works Programme. This municipal initiative provides hundreds of jobs per year in George – but they need ideas on how to get off the paper system!

There will be 3 rounds to compete in... and you can win them all!

Bright Idea: Show wireframes or screen mock-ups of your proposed app. Winner takes **R3000**

Feature shoot-out: Demonstrate an idea or unique working feature that makes the crowd go wow! First prize: **R1000**, Second prize: **R500**, Third prize: **Extra slice of pizza**.

Functional Prototype: Demonstrate an actual working app with the core elements of *registration*, the *random draw* and *mobile communication* with participants: **R10,000 cash**.

Pizza and coffee will be on tap while you hack.

Have a look at the challenge on the next page and drop by for the briefing session on Friday at 18:00 at Office Reliance, 123 Mitchell Street, George.

Here's the full programme for the two days with free talks by Simon Stewart:

Friday, 29 November	
12:00 – 12:30	Why pet projects can boost your career (and giving up your lunch hour for this is a good idea).
13:00 – 13:30	The art of the elevator pitch – practical tips for entrepreneurs.
14:00 – 15:00	Hardcore Javascript for developers
15:30 – 16:00	What system developers can learn from Toyota's Kaizen to make us more efficient.
17:00 – 18:00	Incubator launch function – Pizza included.
18:00 – 19:00	Hackathon briefing & developer quiz. Great fun and great prizes.
19:00	Hackathon starts
Saturday, 30 November	

8:00	Venue is open for hackathon teams who want to work on-site.
9:00 – 9:30	Introduction to MongoDB and open source databases.
10:00 – 11:00	Minimal Viable Product workshop for entrepreneurs. What does it take to start a startup?
12:00	Reveal wire frames and prize giving for best concept.
17:00	Reveal prototype applications and prize giving for best demonstration.

Here's the challenge:



A large number of EPWP (Extended Public Works Programme) projects are staffed using a public draw (lottery) mechanism. Residents in specific geographical areas are asked to complete an application form for working on a specific project (e.g. cleaning of streets, sidewalks, etc). These forms are then placed in a sealed container, from which the required number of workers per project is drawn.

In line with national EPWP principles and the adopted Council Policy, these projects are designed to provide maximum work opportunities. In light of increased unemployment and the dire social needs in communities, a marked increase in the number of potential participants in these programmes have been noted. There are cases of 2000 or more hopeful applicants would show up at the community hall on draw day for 4 jobs. Individuals that have worked in the programme in the 6 months prior are not allowed to participate again. Increased incidents of fraudulent actions have also been



noted, with participants trying to obtain work opportunities even though they have been employed for the 3 months prior. Increased incidents where participants obtained multiple registration forms and thus have more than just one opportunity to be drawn for participation has also been noted.

Current EPWP Administration systems are web-based (online) systems where participants ID numbers are used to track their eligibility. Only after a draw has been completed can the administrator check based on ID Numbers whether new participants



have been working previously. This also causes some administrative challenges as these work placements must then be re-allocated.



The Economic Development Unit believes that through the use of technology the **registration and draw process**, as well as the **management of the employment history of participants**, can be improved. For example, if an electronic database can be developed where all participant

information is centrally stored upon first completion of a form. This same database should be utilised to thereafter store employment records, performance records, etc. Barcode IDs could then be utilised as means of access control, where officials could utilise barcode scanners to scan the IDs and immediately confirm eligibility e.g. if a person has worked in past 6 months, entry will be denied. This could be taken further and linked to home affairs systems where the validity of the ID could be verified in real time.

We want to see a prototype of a public kiosk type application that will allow a participant to register themselves and periodically check in for job opportunities. The target audience are poor and often destitute individuals with little to no access to technology and the kiosk in a public place will be the only means of access. They must enter for a draw to be eligible for selection. This draw must happen in public (on the kiosk itself or community hall) and the selected parties notified to come to work by means of mobile messages or via the kiosk when they next check in. To eliminate the feeling of unfair or a “rigged” draw, it is proposed that the participant select their own “lucky numbers” which will be used like the lottery to draw a successful candidate. Your own clever idea for this aspect may make you a winner!

The skill in the hackathon will not only be around who can write the best code in the shortest time, but also who can design something even illiterate people can use and will be accepted by the community as a fair system. Your best wire-frames, features and ultimately application will make you a winner and open the door to implement your invention for real in our town.

So, you think you have some clever ideas to solve this problem?

RSVP to hack@grincubator.co.za to enter or find out more.