



Talent Acquisition

Sept 2024



It is accepted that challenges are experienced to attract new, capable and competent people to become Progress OE developers.

As a matter of fact, in a meeting at the ACORD (the financial services messaging standards authority) conference in Las Vegas, Presidents and CEOs of most large US and European financial institutions say there is a massive shortfall of all programming skills worldwide

The topic of this presentation is to share with you how MIP have approached this problem and how we have managed to employ more than 400 dedicated full-time Progress OE developers.

AGENDA

- **Where is South Africa, who is MIP and what are the challenges faced?**
- **People and engagement journey**
- **What have we learnt and how can we improve?**
- **Q&A**



24+ MILLION
BENEFICIARIES

LEVEL 1
B-BBEE Contributor

600+ STRONG
Team of MIPeople

PPPP
35% Female
K9 anti-poaching



HealthCare, Risk and Funding



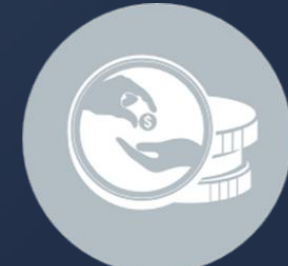
Individual Risk & Insurance



Group Risk & Insurance



Wealth Management



Lending



Research & Innovation



Continuous Improvement

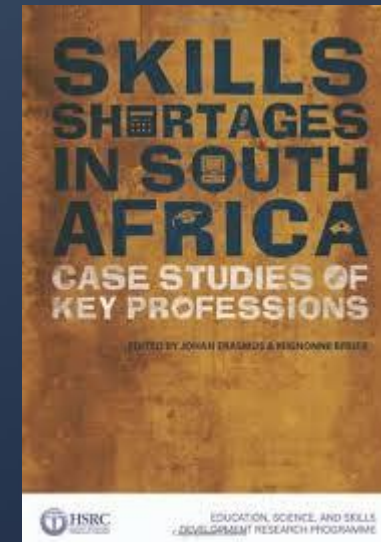


Big Data



**International & Outsourced
Development**

Business Environment in South Africa



Birth of MIP Internship Program

- **Recognised the need for skilled Progress OE developers to support our business.**
- **Understood the impact of lack of skills and how this contributed to high employment.**
- **We accepted the role that the company can play to transform workplaces from a moral, social and regulatory perspective.**

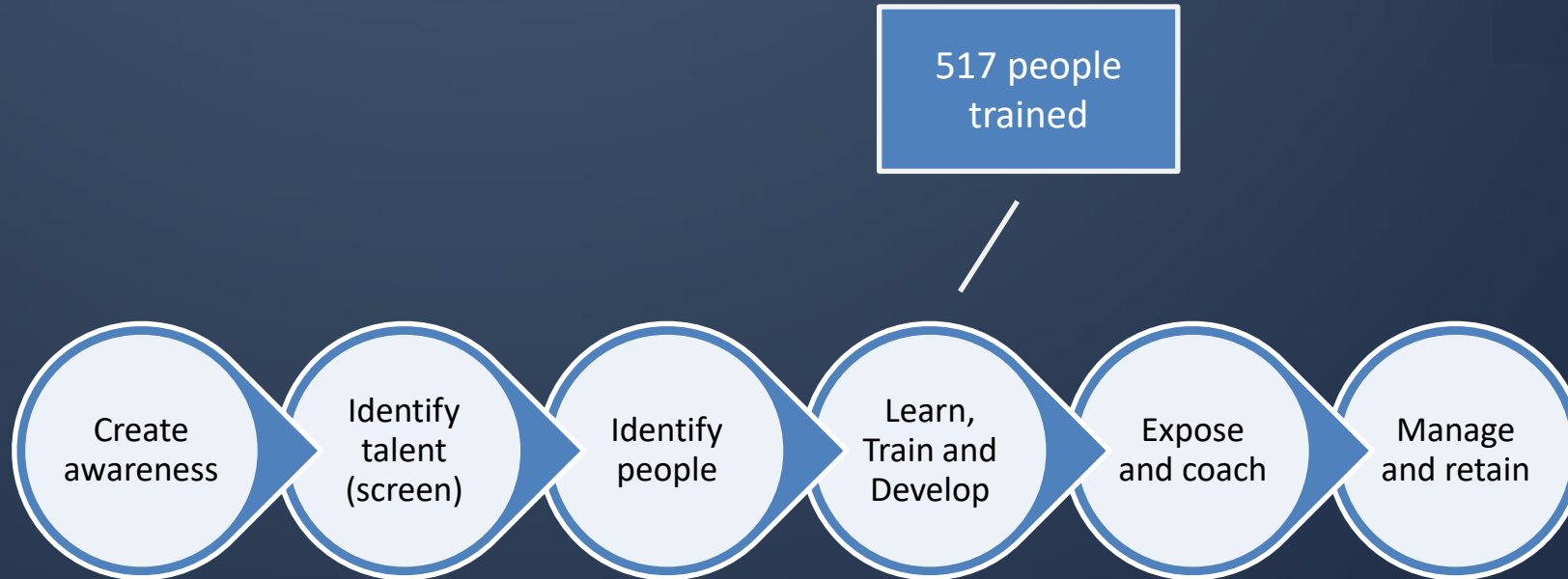


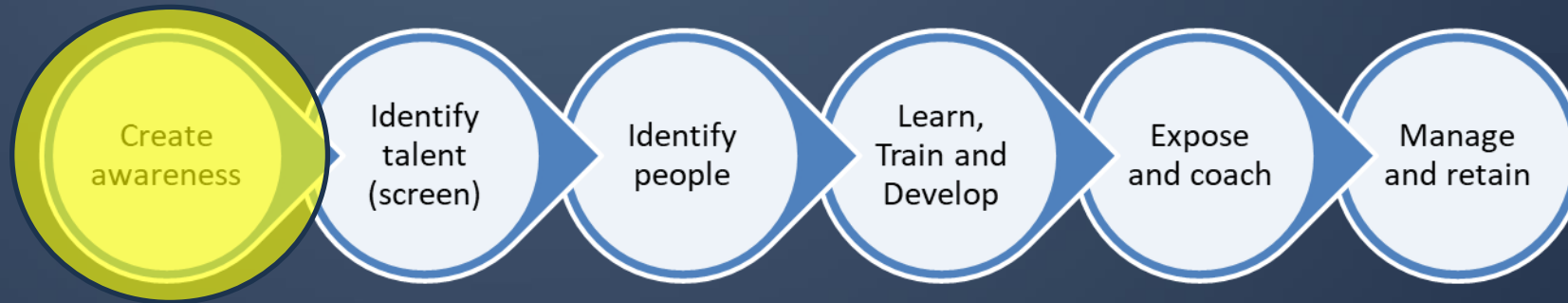
First Class was held in 2008

AGENDA

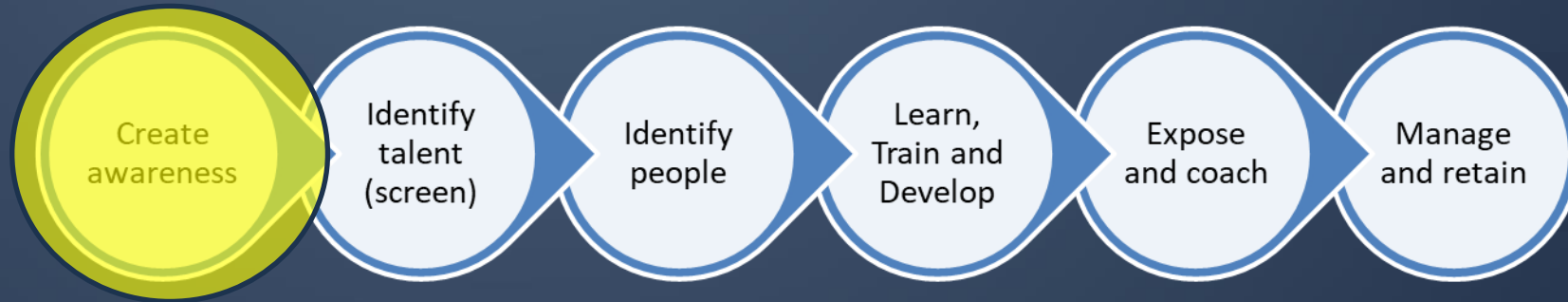
- Where is South Africa, who is MIP and what are the challenges faced?
- People and engagement journey
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Birth of MIP Talent Acquisition Program





- **Aligned with universities to find graduates, and participation in job fairs**
- **Network of Recruitment agencies**
- **Linked-in**
- **Word-of-mouth and internal references**



KNOWLEDGE ACQUISITION

Are you ready for the challenge?

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If you are interested solve this puzzle:

21613@23151811.co.za = fun@work.co.za
which will lead you to 171225.13916.co.za

It's as simple as that!

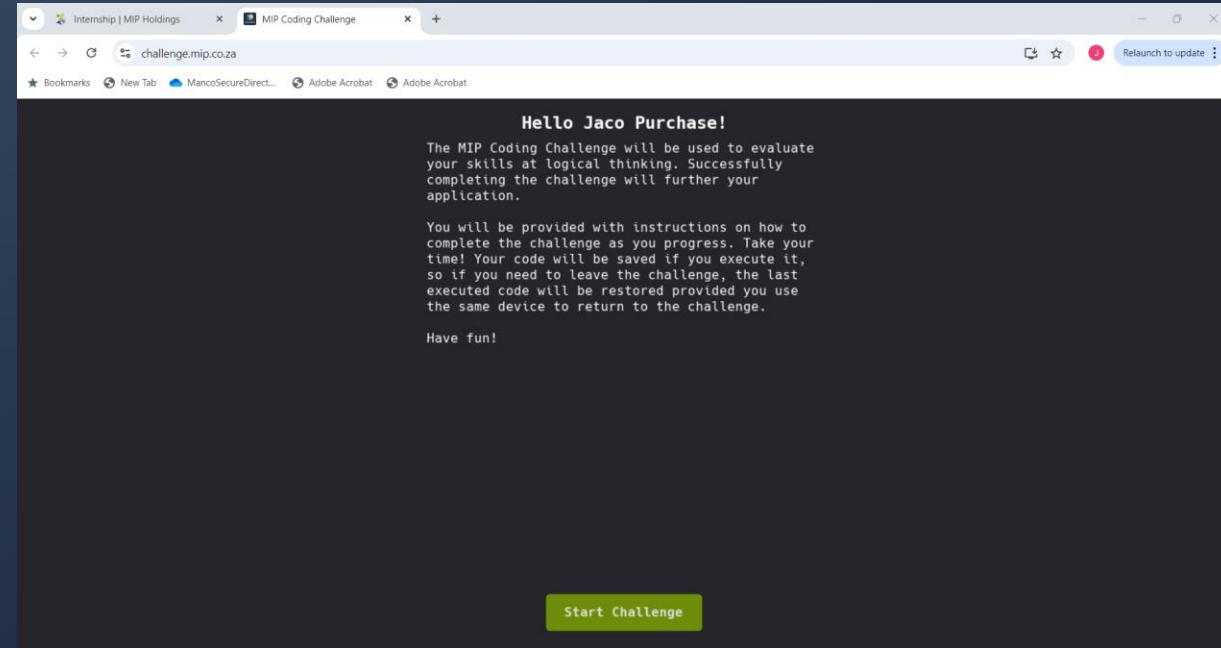
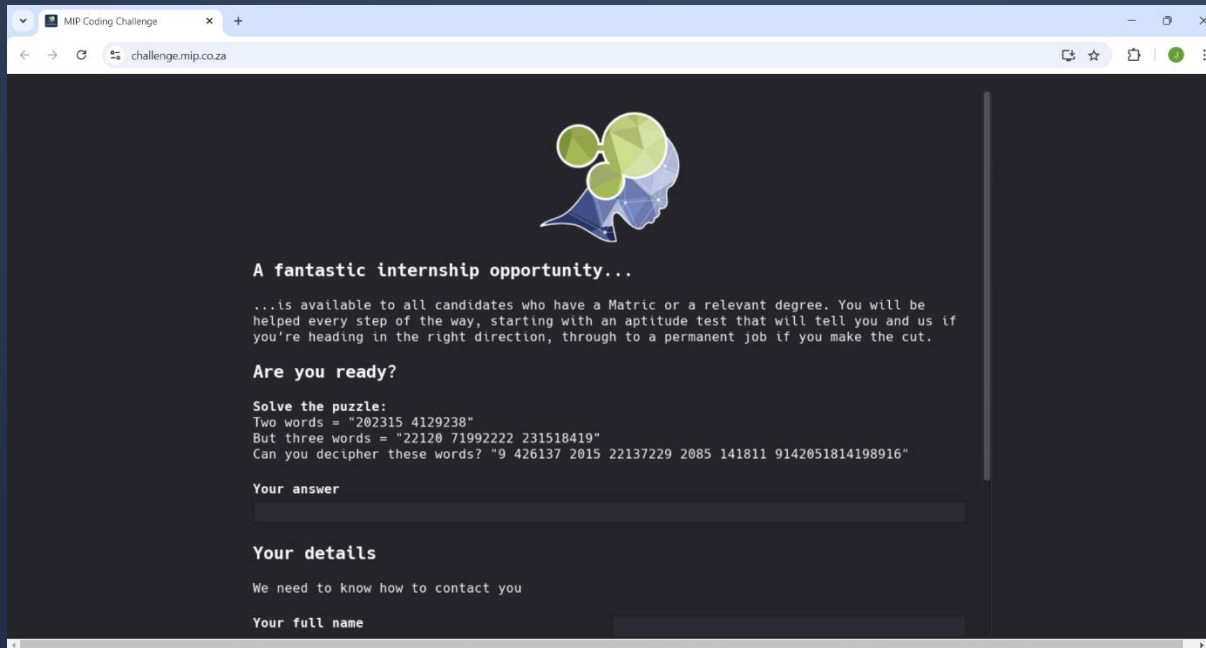
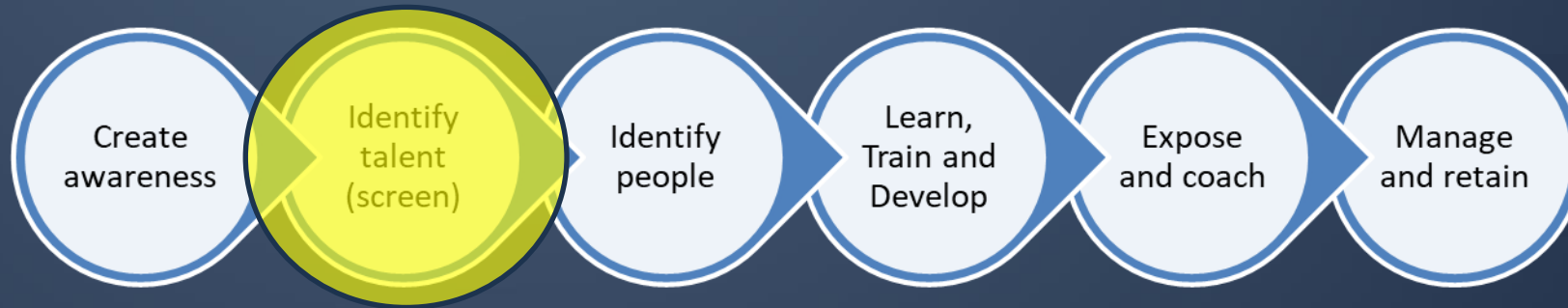
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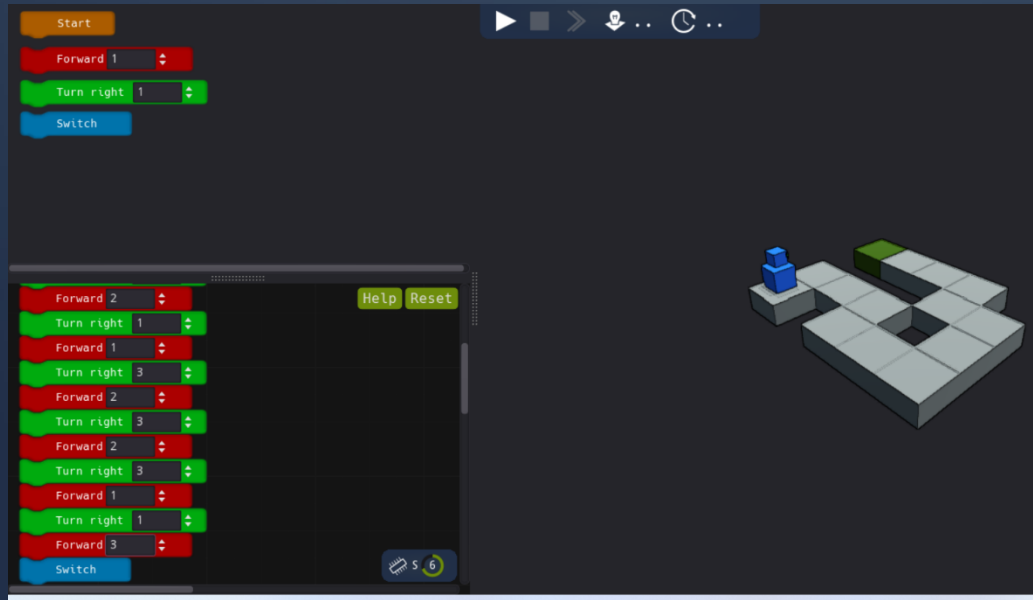
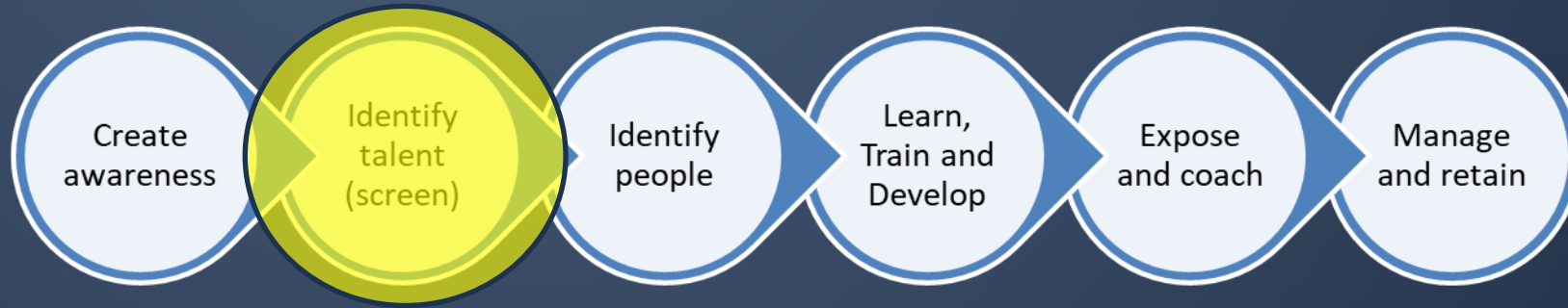
The course is short, and the opportunity is long!

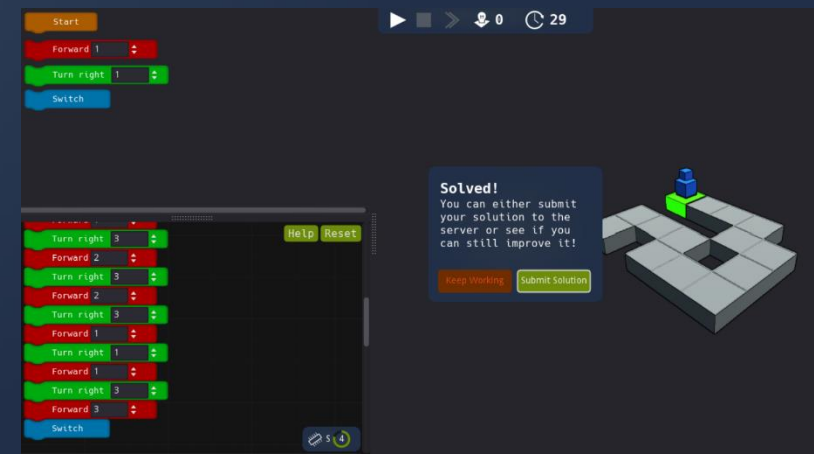
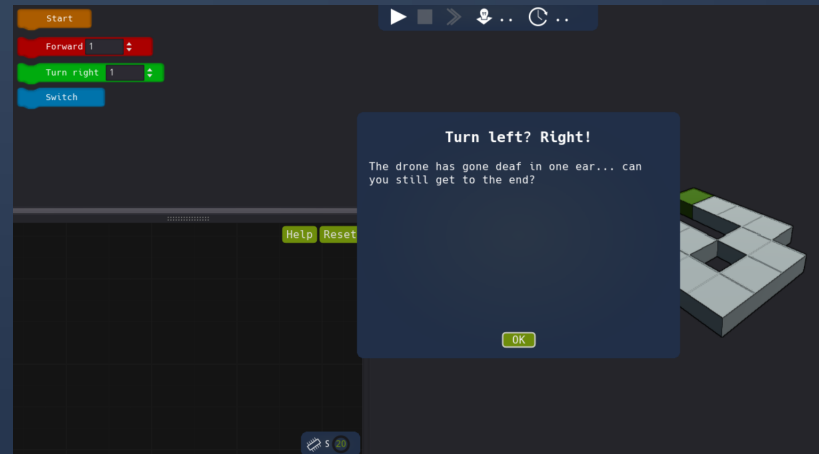
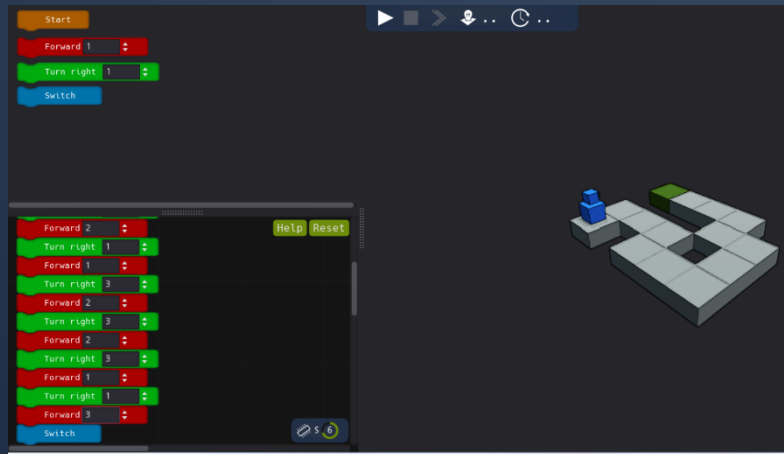
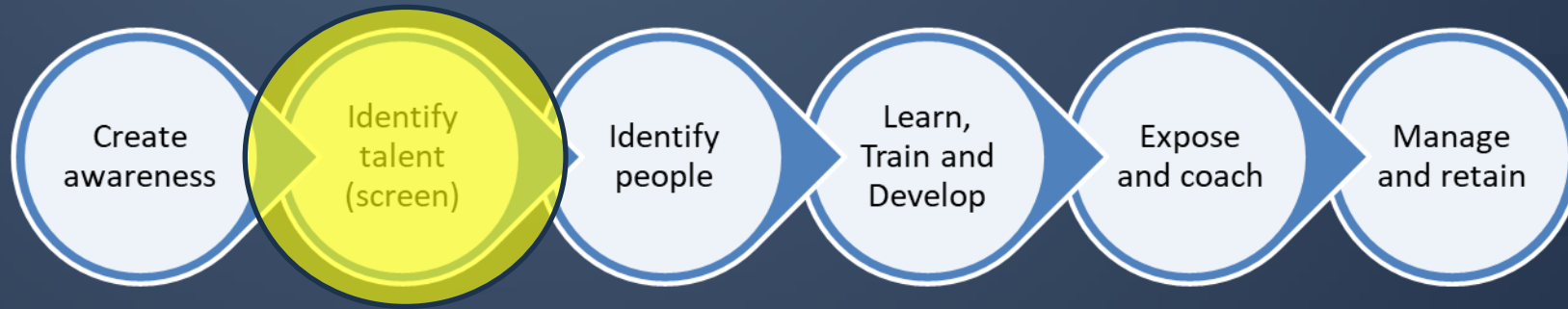
Software Engineers and Problem Solvers wanted!

A fantastic internship opportunity is available to all candidates who have a Matric or a relevant degree. You will be helped every step of the way. Starting with an aptitude test that will tell you and us if you are heading in the right direction, through to a permanent job if you make the cut.

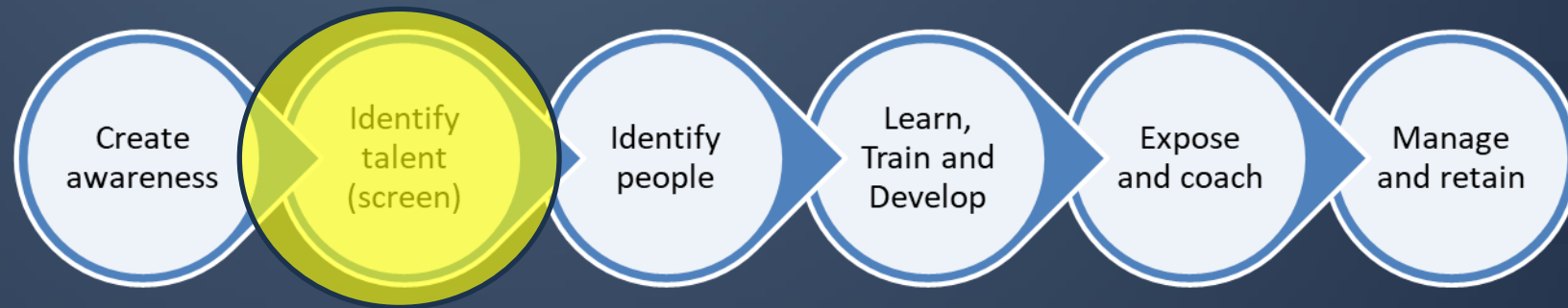
*Remember interns who succeed will get paid a salary for the duration of their training and have the opportunity of permanent employment at the end of the internship.







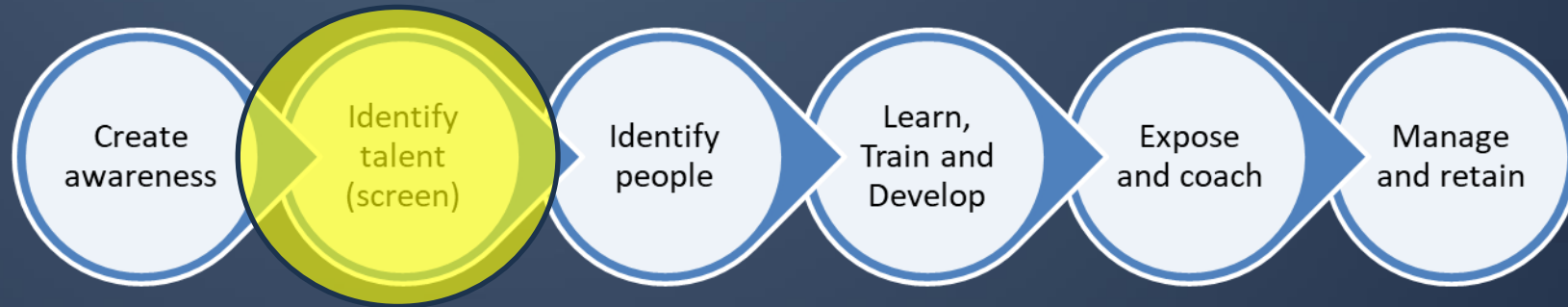
Last month received 1200 solved games



80% of people attend

- **If candidates meet specific age and nationality criteria, we invite people to come to our offices, either in Johannesburg or Cape Town, for follow-up test.**
- **At these tests, we verify the candidate's ID and then conduct a test to simulate pressure to evaluate logical thinking and pattern recognition. Tests are marked and feedback is given immediately.**
- **Cannot share tests but will show in Word.**

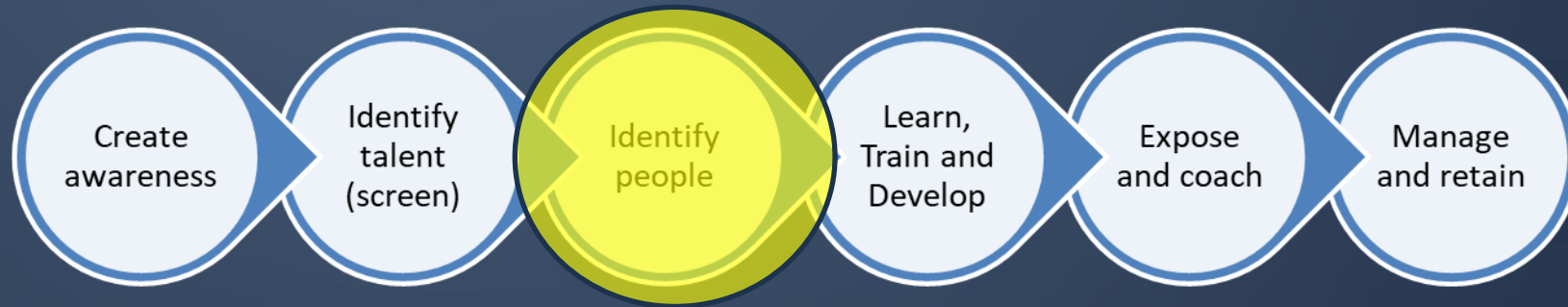
On average 2 out 9 complete 2 out 3 challenges



- Using a 3rd party assessment, tool, candidates are required to complete VZAP test.
- 5 hour in person test in Johannesburg.
- 70% pass mark is required, with specific sections more important to MIP than others.

CONCENTRATION	1	100%
PERCEPTION	2	100%
SPEC READING	3	75%
CONCEPTS OF TABLES	4	90%
CONCEPTS OF POINTERS	5	50%
TOTAL OVERALL		83%

Average of 15%
pass rate of people
who write VZAP



- **Successful candidates are then requested to send their CVs and are invited to in-person interviews, with focus on two aspects:**
 - **Personalities (attitude, strengths, weaknesses, support structures, person outside work)**
 - **Review technical performance (pattern recognition)**
- **Based on the results of the various tests, and these discussions, a final (ranked) list of candidates are identified, with class sizes determined based on needs of company.**
- **Formal internship contract is offered for 3 years, and candidates are treated as full time employee.**



- **The actual internship is an in-person facilitated class running for 3 months, focusing on:**

Largest class was 31

- **Progress OE Development**
- **MIP Framework and DEP**
- **Standards**
- **General behaviors (attitude, networking, timekeeping, source control, etc)**

Theory and practice equal weighting

- **Integral part of the course is a practical system that is developed where theory, techniques and standards are applied and evaluated.**
- **Continuous assessments for theory and practical work, with balance achieved in terms of focus and speed of delivery.**

On average about 5% of candidates fall out during internship



Week_00
Intro ABL Dojo Intro (KEYWORDS, Statements) Intro (Variables) Intro (Loops) Intro(Conditions)
Week_01
4GL Basics Desktop, Hello World, ProPath, Help DataBase Intro & Basics OE Fundamentals (KEYWORDS, Statements, Frases, Structures, Loops, Files, FINDS, FOR EACHes, WHEREs, DISPLAYs, Sorting) Variables (Types, convert, compare, Lists, Conditions) Queries (Static) CRUD of tables TRANSACTIONs Locking and Record scoping OE Error Handling (Intro)
Week_02
Error Handling 1. (OpenEdge, MIP Old, MIP New) Procedures,Functions,Includes & Scoping of Variables, Persistence. Temp-Tables, Includes. Dev Standards + Programming Concepts. ABL QuickReference Lab1: WIP - ABL Quickreference Lab 2: Base Conversion Programs. Lab 3: Class exercise on DB design for DVD Store.
Week_02
Introduction to Training (DVD Store) Database (OBJ numbers, Owing Entity Mnemonic, Owing Obj) Lab 4: CRUD plip trm_person, RUN PERSISTENT. (INPUT, OUTPUT and INPUT-OUTPUT parameters) Test procedures. Lab 5: CRUD plip trm_movie + generate movie code, RUN PERSISTENT. (INPUT, OUTPUT, INPUT-OUTPUT parameters) Test Procedures. Understanding Scoping (Local variables, global variables, shared variables, globally shared variables)

Week_03
Debugging Techniques 1 Lab 6: Link tables (Owing Entity Mnemonic and Owing Obj) functionality in plip for trm_person. Test Procedures.
Week_04
Streams - Importing data, log files. Lab 7: Import Program - Movies. Import Program - Actors + Links to Movies. Using procedures in plips to import data. Introduce TEMP-TABLES to assist with collecting data before creating the DB records
Week_04/05
Object Orientation Lab 8 : Object shells for person and movie. Lab 9: Instance objects with methods to call plips . Lab 9.5: Focus Methods and Overloaded Constructors using Focus Methods. Performance Programming 1, Profiler (Not enough time or context to cover this) Debugging Techniques 2 (Recap)
Week_06
Warspeed Usage. Lab 10: Warspeed setup (Users, Menus, Categories, Acronyms and Statuses) Lab 10.5: Generate DVDs using functionality from Lab 5. Using procedures in plips to generate data. Lab 10.75: Import Accounts and Account holders. Using procedures in plips to import data. Introduce TEMP-TABLES to assist with collecting data before creating the DB records Introduce self joins to TEMP-TABLE by defining a further buffer for the TEMP-TABLE MIP environment Utilities. Lab 11: Build Utilities into Plips (Preferences, DB Entity, miplaunch.i replacing RUN PERSISTENT in classes) MIP Helper Objects (Status and Acronym Helper Objects) Lab 11.5: Convert data - Convert Acronyms and Statuses Lab 12: Add Helper objects to movie and person class. Status and Acronym helper objects.

- Each candidate is issued with laptop, full local development environment.
- Documented, recorded classes are stored in repositories for future reference
- Sample code, tips are also provided that can be used as reference



Week_07/08

Introduction to HTML and Web

Lab 13: Static HTML page.

Lab 14: cgi-wrapper for movie table with CRUD functionality.

Warpspeed 4. (ABCD)

Lab 15: Movie Wob (Use DB access / Old approach)

Lab 16: DVD Override Wob (Use DB access / Old approach)

Lab 17: Options Menu linking Movie wob to Override Wob.

Week_08/09

SOA & Services

Lab 18: Movie Stack and Service

Lab 19: Person Stack and Service

Lab 20: Person and Movie Instance Objects.

Lab 21: AppServer, Person and Movie Wrapper.

Lab 22: Upgrade Movie and DVD wob to use full SOA services and Objects.

Week_10

REMs & REFs

Templates & Events

DS: Multimedia

Lab 23: Import Movie Posters into Multimedia and link to trm_movie with REM.

Lab 24: Implement Movie Posters using Multimedia in Movie Wob. Add Preview.

Lab 24.75: Implement Geolocation in Person Wob (If there is time)

Week_11

DS: Workflow

Lab 25: Build basic WF.

DS: RX / Jasper Reports

Lab 26: Jasper Report for Outstanding DVDs.

DS: JOB Manager

Lab 27: Automate Outstanding DVDs report with JOB Manager.

DS: Questionnaire's (Old)

Lab 28: Build basic Questionnaire.

DS: Communications

Lab 29: Movie Enquiry Email

Week_12

Intro to Warp 5:

Lab 30: Basic Person Warp5 Wob

Lookups and Ajax

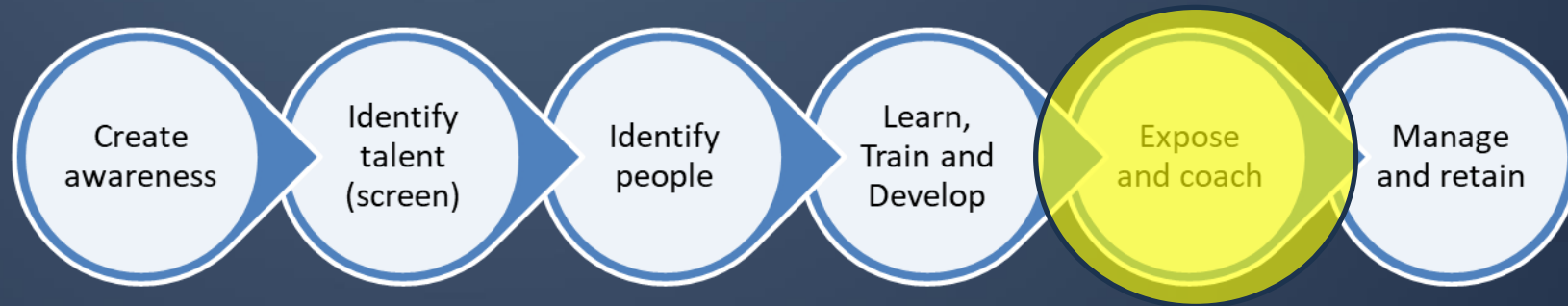
Lab 31: Implement Lookup override and Ajax in DVD Wob (Warp 4)

Intro to JavaScript

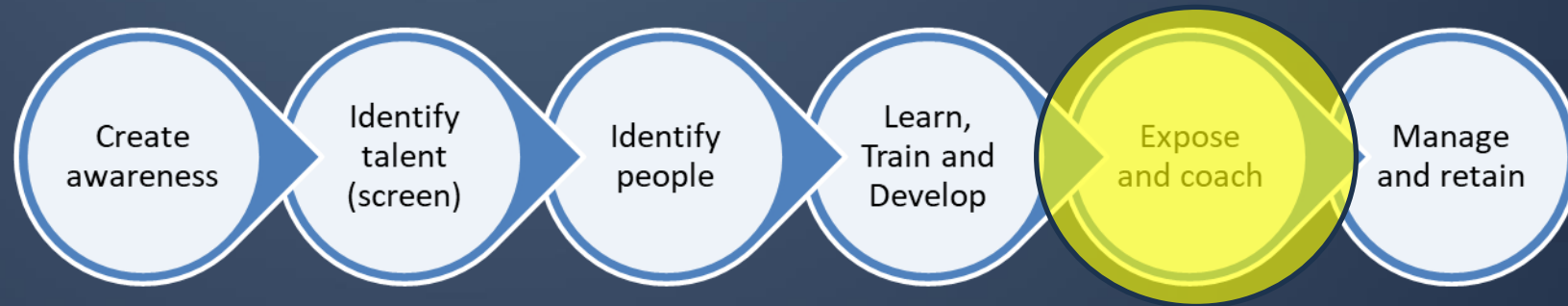
Lab 32: Implement JS in Person Wob. Updatable Search Results, Select all / deselect all JS button. (Warp4)

Week_13.5 - 14

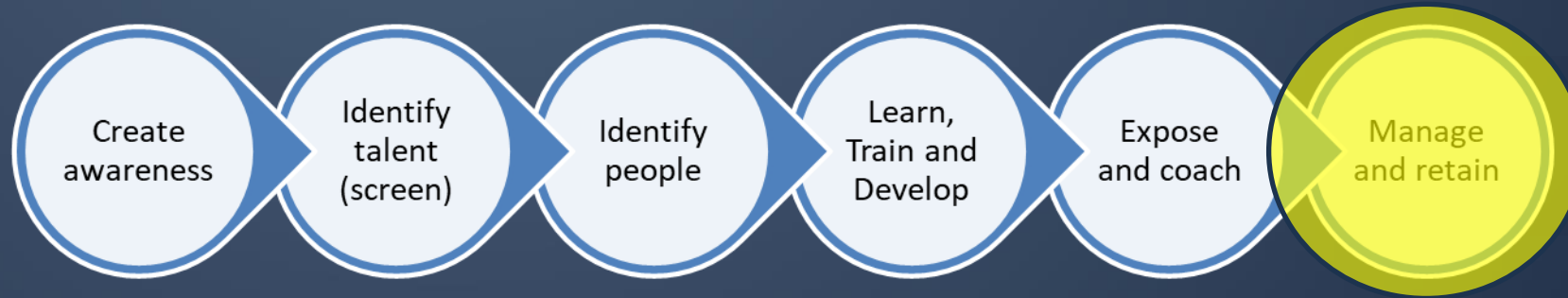
Final Project.



- **At the completion of the course, each division has opportunity to engage with new class and explain specific aspects of the work. It also provides further overviews of MIP and its various offerings.**
- **Whilst preference is considered, MIP Trainers in conjunction with Division's inputs, assign resources to teams.**
- **On the last day of the internship, the class has opportunity to present practical system to Exco.**



- **Candidates are shown specific nuances of systems and assigned work.**
- **Sprint Buddies, mentors (formal and informal) and team leaders are then responsible to nurture and further support candidates.**
- **Assigned real tasks (either BAU or Project) with every task reviewed and evaluated, with formal salary adjustments taking place every 3 months.**



- To formalize qualification, MIP entered in agreement with accredited and certified training institution. Junior Engineers attend classes and complete assignments to receive Diploma equivalent accredited qualification.
- Interns have to stay with MIP for 3 years.

388 / 517 who completed course are still with MIP

12 people bought themselves out before completion 3 years

AGENDA

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Future steps and opportunities for Improvement

- **Already have processes where Senior Developers, Team Leaders and mentors provide feedback on specific real-life topics that may need further attention. Feedback is also obtained from candidates themselves.**
- **Reviewing the weighting of theory and practical marks, where we are seeing better performance from people who did well in practical.**
- **Find balance between general Progress OE content, and MIP specific content, given the different frameworks and technologies used.**

Future steps and opportunities for Improvement

- Automate additional processes to allow for further scaling and economy of scale.
- Align MIP Internship and Training Course with Progress OE courses to ensure latest content and details.
- Explore tailored content for Divisions and other Progress OE customers, including other Front-end technologies.
- Provide refresher courses to existing teams based on newest developments.
- Expand program for other roles in SDLC e.g. CSM, SM, Test Engineers and Bas.

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