INTERNITY

'TOGETHER WE CAN'

Internity Foundation Introduction

Who We Are :

A Non-Profit Organization working with a motive to uplift India technologically, inside of Innovation and Contribution. With a team of 35+ Members present in 7 cities of 4 states, we have taken on a game to transform learning in engineering colleges, promoting startups and research, all this with a vision ‘To make people creators not users’.

Backed By

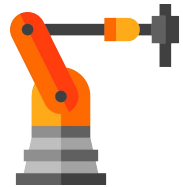
Rannlab Technologies Pvt. Ltd.

CloudDive Labs Pvt. Ltd.

Unanth Technologies Pvt. Ltd.

We the Indians

We are Engineers



We Provide worldwide Automation Solutions

We Provide 90% of Worldwide Banking Solutions

We do worldwide Advanced Scientific Contribution

Still a high number of our countrymen are deprived from the power of technology

Problem : People are Users, not Creators

Nominal Learning Environment in Colleges

Lack of Exposure to New Technologies

Learning Curve Challenges

Ever Increasing Gap between Colleges & Industry

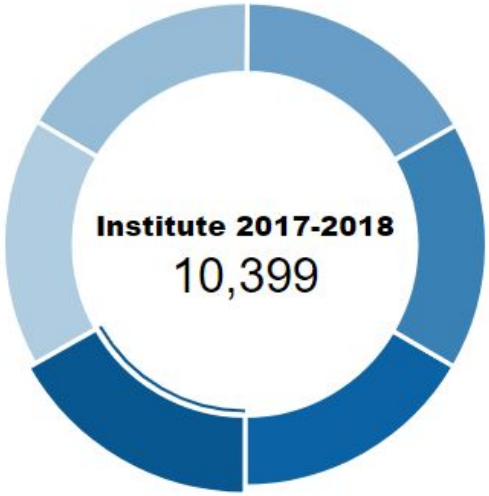
Low Possibilities of getting Jobs

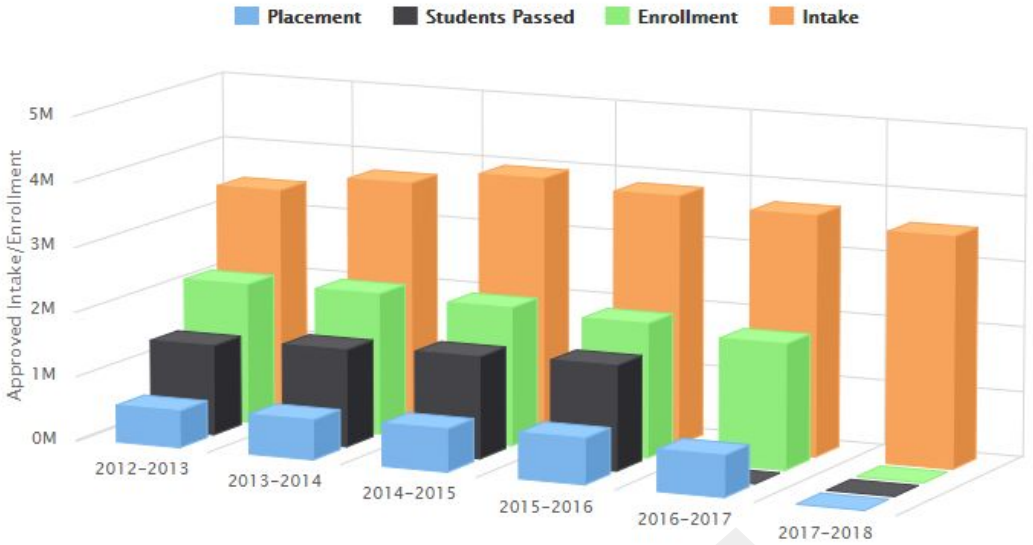
Less Scope of Research Opportunities

Insignificant Open Source Contribution by India

Lost Startup Incubation Opportunities

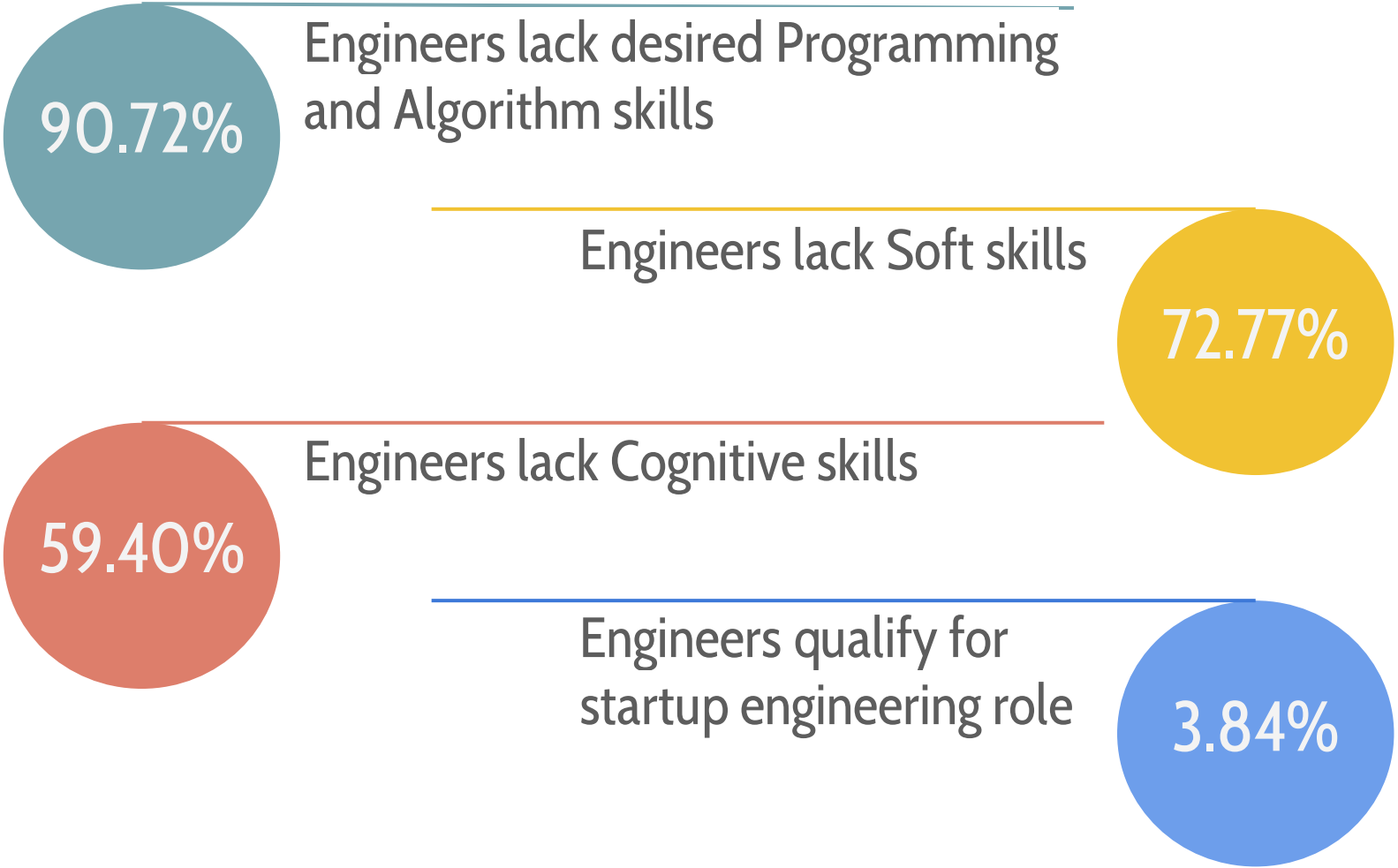
Chronic Problem of Brain Drain/Talent Migration





2:1 Intake:Enrolled

3:1 Enrolled:Placed


90.72%
Engineers lack desired Programming and Algorithm skills
Engineers lack Soft skills
72.77%
59.40%
Engineers lack Cognitive skills
Engineers qualify for startup engineering role
3.84%

THE TIMES OF INDIA, BENGALURU
WEDNESDAY, JULY 26, 2017

Now, internships mandatory for engineering graduates

Move Will Help Students Get Jobs: AICTE Chairman

From framing a model curriculum to address underemployment among engineering graduates to handing them degrees only on completion of four months of internship during their course, some overarching changes are in the pipeline in technical education in India. Anil Sahasrabuddhe, chairman, All India Council for Technical Education, tells Manash Pratim Gohain. Excerpts:

- **More than 60% of the engineers graduating every year remain unemployed.**
- **This is a potential loss of 20 lakh man days annually.**

They are not 'unemployable' but they are 'underemployed'. The industry says 60% of our graduates are not fully prepared. So they need further training, which means to start with these students may not get the same level of salary as compared to 40% of their peers. Instead of starting with a salary of Rs 4-5 lakh , they are not even getting Rs 1.5 lakh per annum.

What is the road ahead?

We have made internships mandatory to fill the gap so that they become suitably employable. Each student is to undergo two summer internships with the industry of two months duration each.

> Each student will have to undergo two summer internships with the industry of two months duration each. AICTE alone cannot monitor the implementation of the internships. We will ask the universities to make the internships mandatory and also to make provision for it in their academic calendar. Universities should also give grades or offer credits for the same
>
> **Anil Sahasrabuddhe** | CHAIRMAN, ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

There are over 10,000 technical education institutions in the country. AICTE alone cannot monitor the implementation of the internships. We will ask the universities to make the internships mandatory and also to make provision for it in their academic calendar. Universities should also give grades or offer credits for the same, at least as qualifying.

What is the status of the single National Entrance Examination for Technical Institutions?

There has been some apprehension and inhibitions from states. So we are waiting for the outcome of tests like NEET.

HRD ministry is planning reforms like mandatory annual teacher training for approval of institutions and annual revision of curriculum. What is the status?

The curricula of our engineering institutions have not been revised for quite some time. In next 10 to 15 days our new model curriculum will be announced. We will ask all states, universities and institutions to adopt that allowing some contextual changes if they feel necessary. A committee of professors of eminence and experts from industry will continue to work for the next five years.

What about MTech curriculum?

MTech curriculum is also very poor. MTech graduate may opt to teach instead of joining the industry. In that case it adversely affects the engineering education. We are planning to change the curriculum radically next year, along with introducing industry internships as well.

Isn't quality of private technical institutions a major concern?

While we can't paint all as bad, however, there are large number of private institutions with poor infrastructure and bad quality students. They don't have well trained teachers as well. But parents and students are gradually rejecting them. And if they fail to fill 30% of the seats for five consecutive years they will have to close down.

Why is Yoga made mandatory for engineering students?

Not just yoga! It can be activities like sports, NCC and also yoga. If some institutions want to give credits as well they can go ahead. This has been done to change the outlook of students and sensitise them on the needs of the nation.

What is your opinion on Higher Education Empowerment Regulation Agency which is expected to replace regulatory authorities like AICTE and UGC?

As of date nothing has been finalized on HEERA. There are advantages of a single regulatory mechanism as there are lot of overlapping of mandate and discrepancies at present.

Only 6 Indian universities in top 400 of global rankings; perform better in engineering and management

The list is awash with IITs and IIMs, and features only one private Indian institution.

By Zee Media Bureau | Updated: Mar 02, 2018, 14:13 PM IST

Comments

EDUCATION

India's education market to nearly double to $180 bn by 2020

By Joseph Rai | 18 November, 2016

SHARE

The Indian education market is expected to almost double to $180 billion by 2020, buoyed by the rapid expansion of the digital learning market and the world's largest population in the age bracket of six to 17 years even as the sector continues to be plagued by poor infrastructure and a shortage of trained teachers.

Organisational Annual turnover of

15-20%

Goes into

Training and Development of Employees

Only **56%** employability

in best colleges

and

Less than 10%

in bottom **30** percentile colleges

An organization that
makes nothing but

MONEY

is a poor organization.

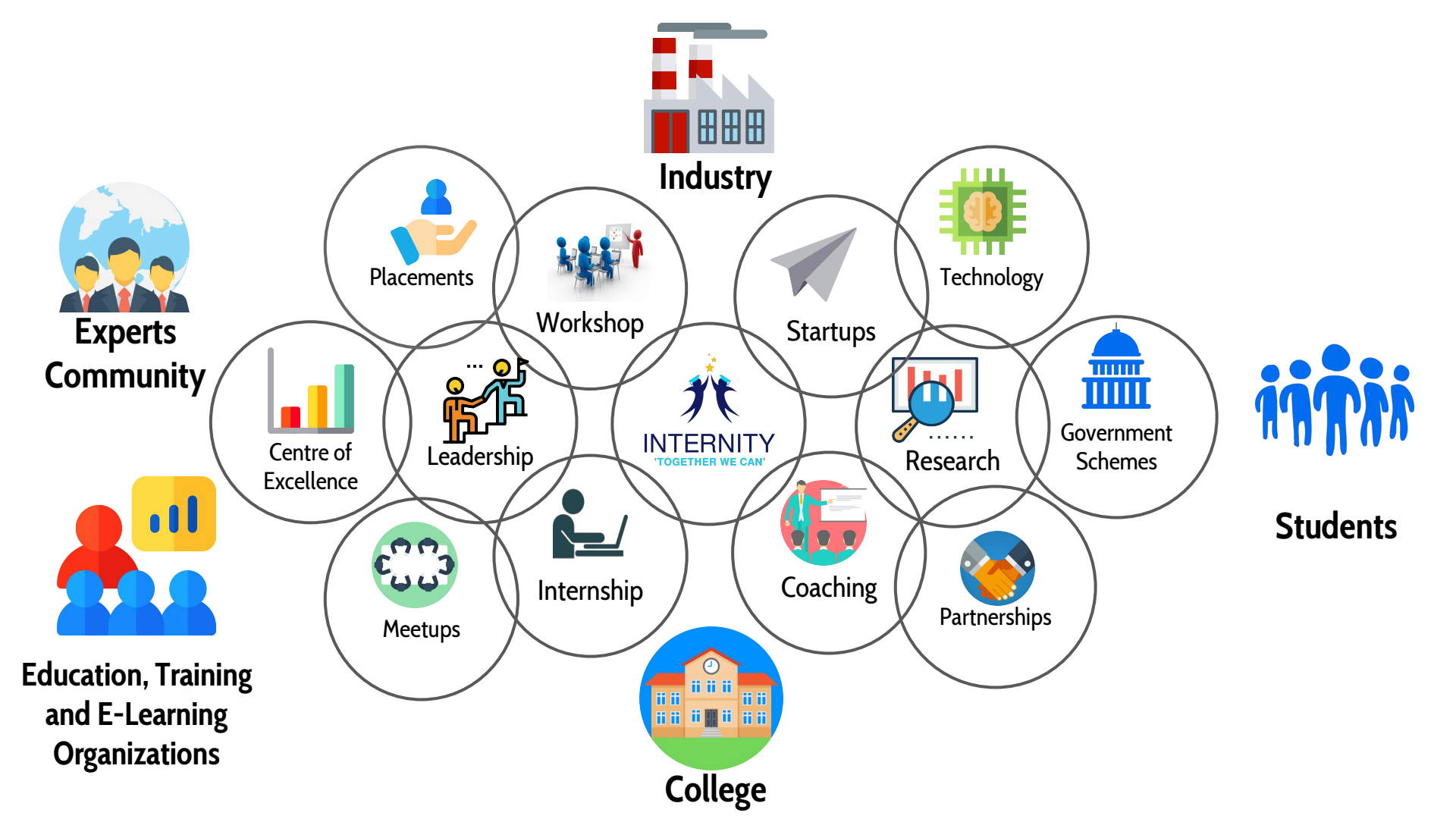
Internity makes minds
that are

CREATORS

not USERS

Solution : Creating an Ecosystem of Innovation & Contribution

We call it
‘The Internity Ecosystem’


Industry
Experts
Community
Placements
Workshop
Startups
Technology
Centre of
Excellence
Leadership
INTERNITY
'TOGETHER WE CAN'
Research
Government
Schemes
Students
Education, Training
and E-Learning
Organizations
Meetups
Internship
Coaching
Partnerships
College

Someone tell you
and You forget.
Someone teach you
and YOU remember.

Internity involves you.
And YOU LEARN!

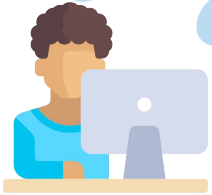
Internity Delivery Model :

Choose Available Program

Get Interviewed

Work As Intern in Startup

Participate in Research Activities



Internship Starts

Get a Coach for dealing with challenges while Learning

Learning Content from our Learning Partners

Unanth

Continuously Evaluated

Get Appraisal

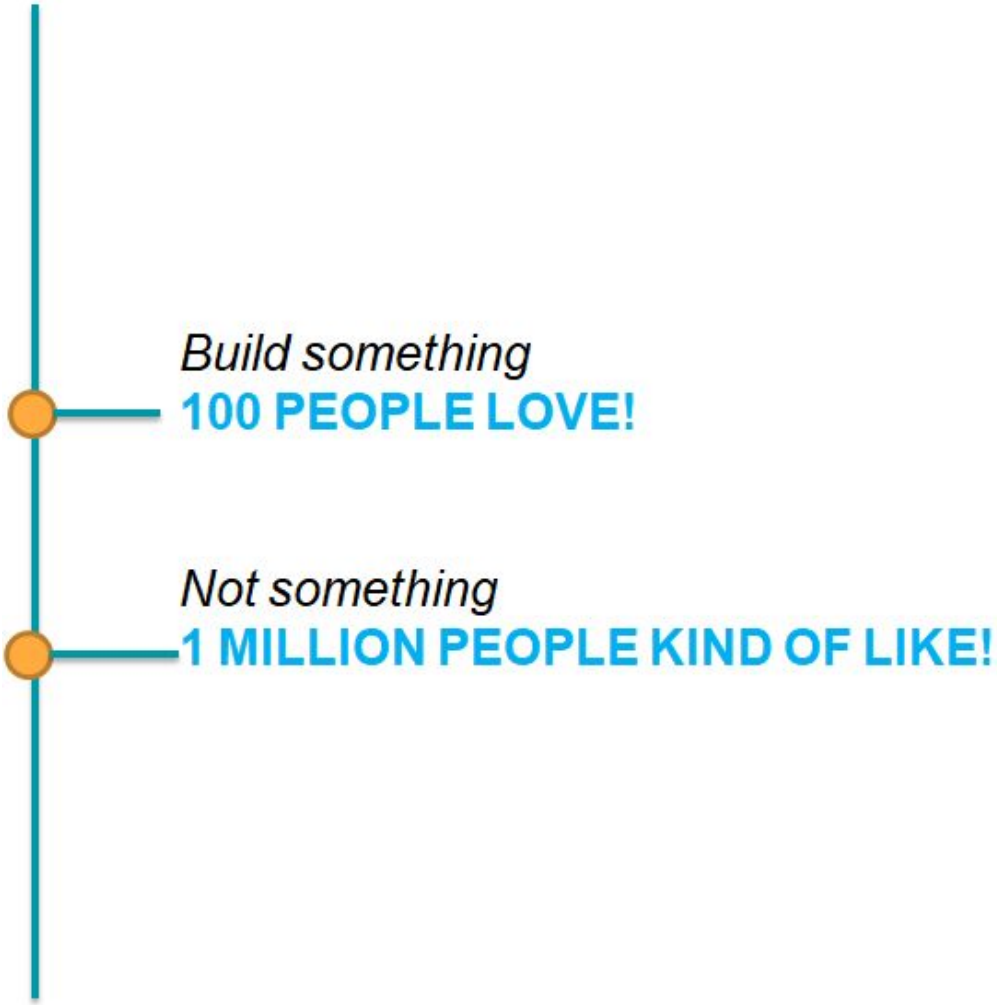
Placement Opportunities

Promotion of Interns in Events, Projects

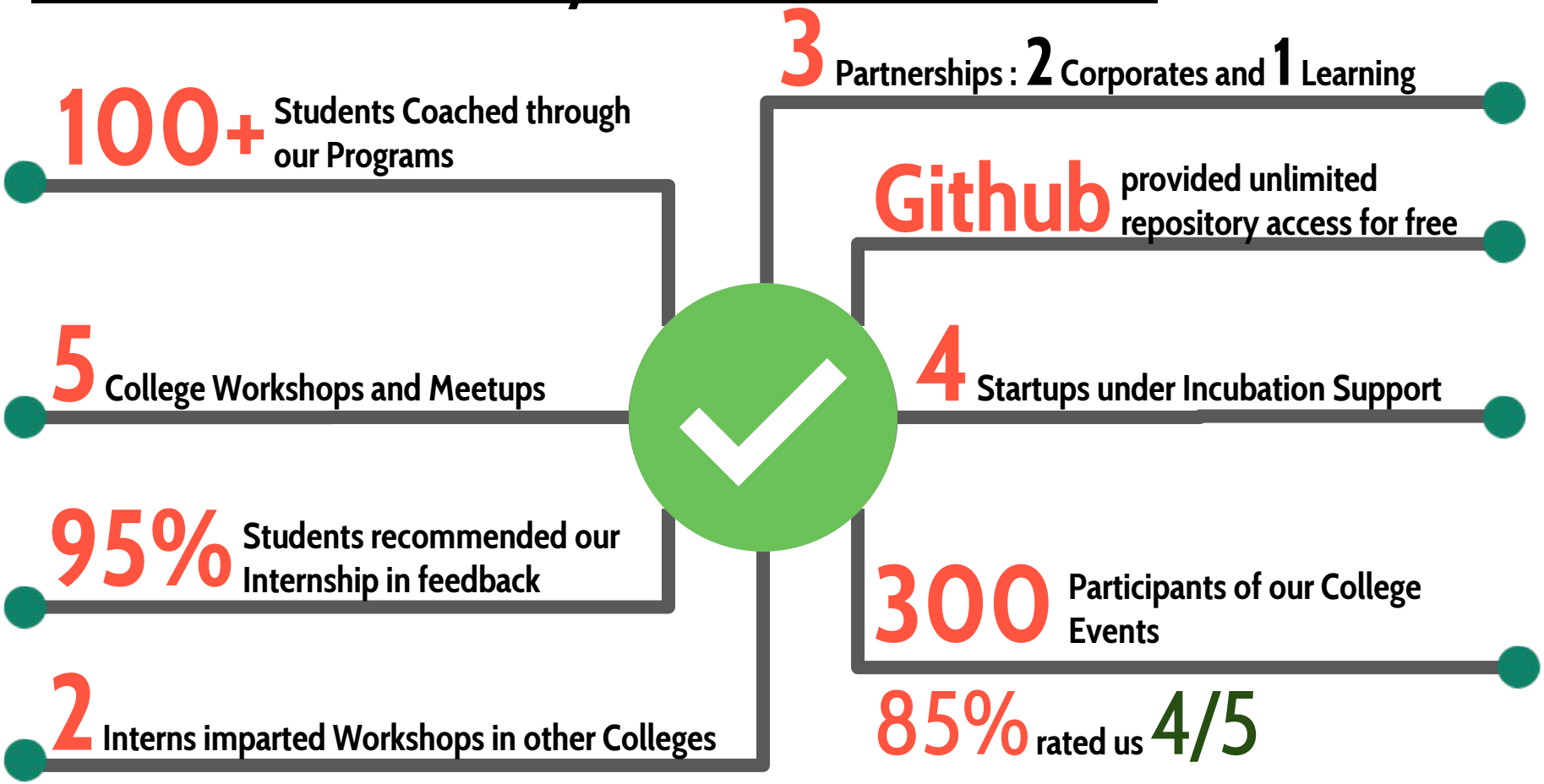
Become Student Ambassador

ISA

Some Collaboration Tools students learn in our Programs :


Build something
100 PEOPLE LOVE!
Not something
1 MILLION PEOPLE KIND OF LIKE!

And the love, Internity has achieved till now :



Creating Empowering Spaces :

Our two honourable speakers :

Shivansh Srivastava(@shiv4nsh)
Nitesh Bharadwaj(@nitesh140892)

docker

Agenda :

- What is Docker?
- Why Docker ?
- Docker Architecture
- Basic Docker Commands
- Demo

What is Docker ?

Docker :

Docker is an open platform for developing, shipping, and running applications.

Docker allows you to package an application with all of its dependencies into a standardized unit for software development known as **Container.**

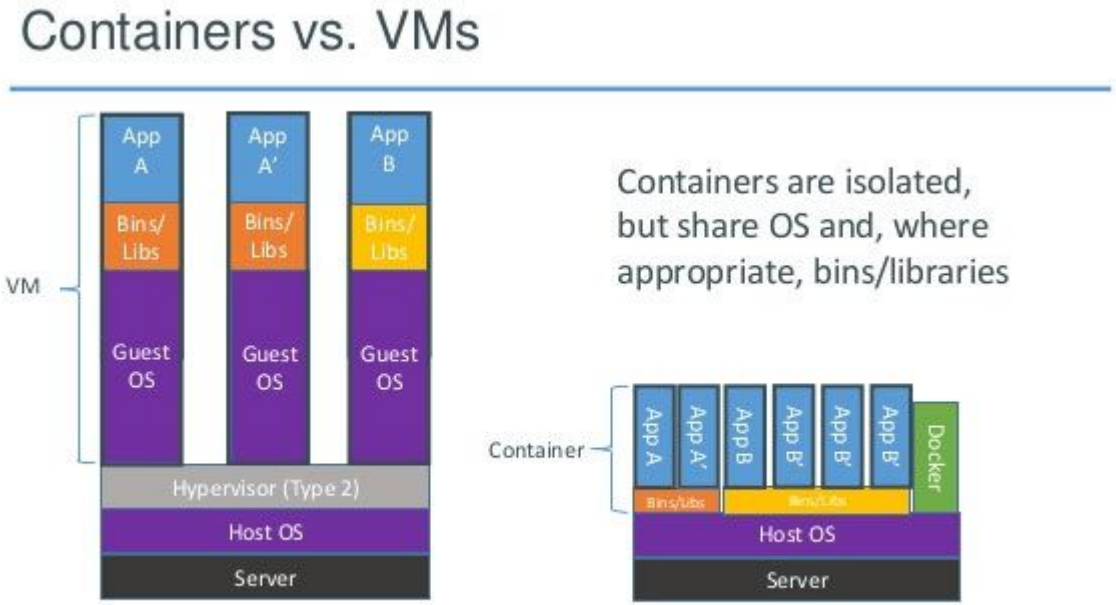
Now What are Containers ? 😞

It is a standardized unit of Software.
A container image is a lightweight, stand-alone, executable package of a piece of software that includes everything needed to run it: code, runtime, system tools, system libraries, settings.

Available for all standard platforms.

Docker VS Virtual Machines

Do you know about Virtual Machines ?



When it all started ?

- Solomon Hykes (@solomonstre)
- dotCloud (now Docker Inc)
- 260k public repositories on hub.docker.com
- Docker joins the "Open Container Initiative", June 2015
- Recently got converted into the Moby Project
- List of Open Source Tools provided by Docker

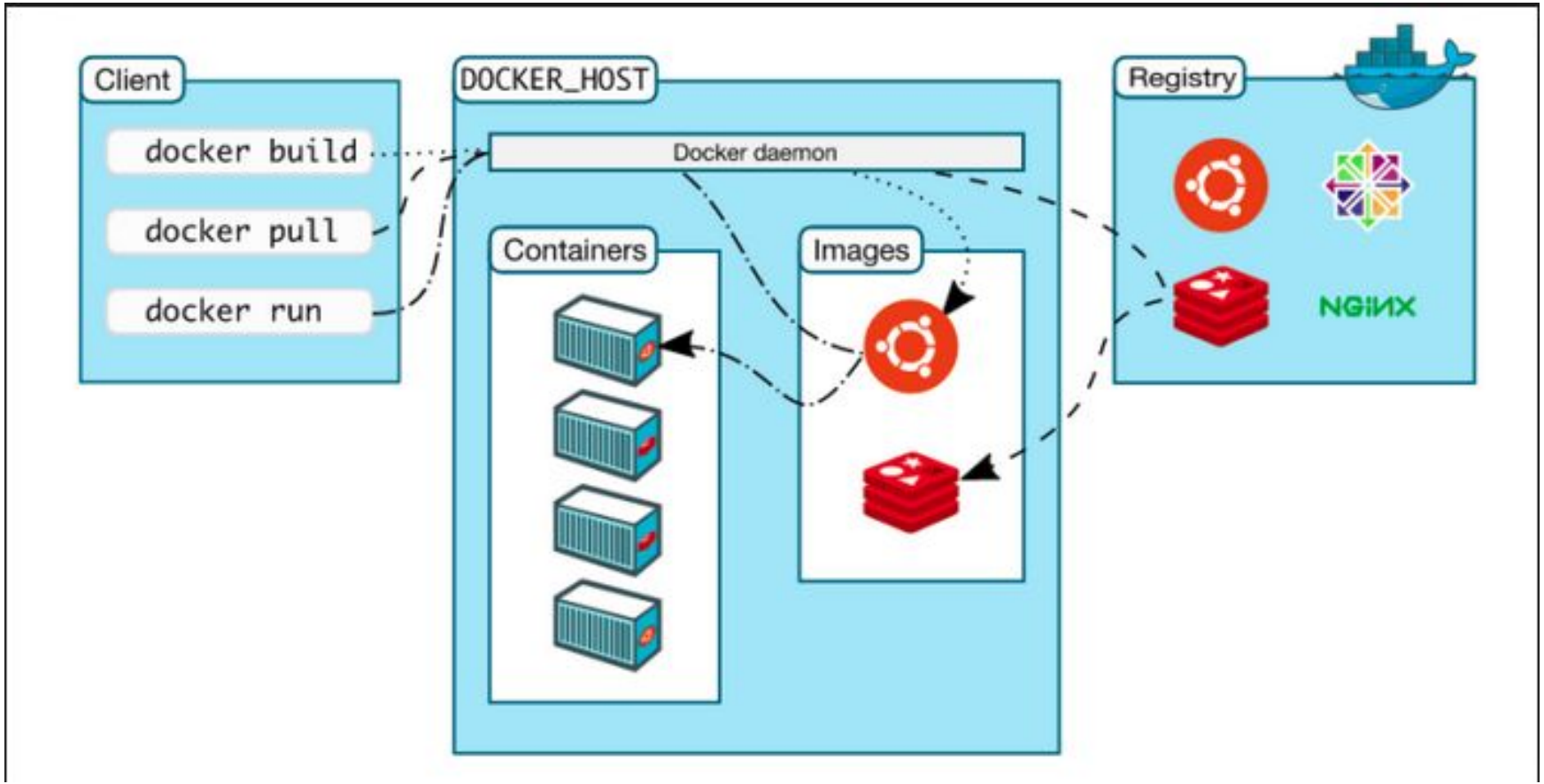
Why Docker ?

Docker is Aweeeee-some ! ! ! Because ...

- Fast (deployment, migration, restarts)
- Secure
- Lightweight (save disk & CPU)
- Open Source
- Portable software
- Microservices and integrations (APIs)
- Simplify DevOps
- Version control capabilities

Docker Architecture

This is what it looks like ...



Docker components

- (Docker) client
- daemon
- Engine
- compose
- swarm

Docker client

It is the primary user interface to Docker. It accepts commands from the user and communicates back and forth with a Docker daemon.

Docker Daemon :

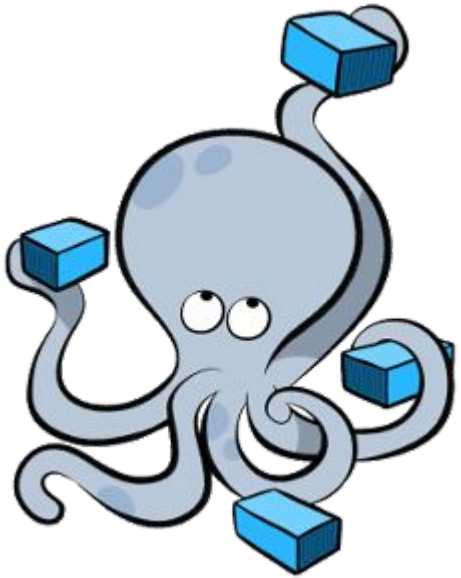
It runs on a host machine. The user does not directly interact with the daemon, but instead through the Docker client with the RESTful api or sockets.

Docker engine:

A Client with a Daemon as also as the docker-compose tool. Usually referred simply as "docker".

Docker-compose

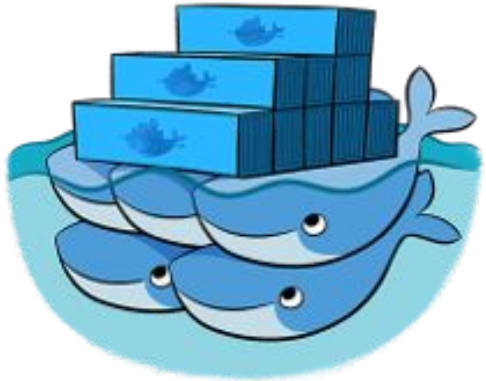
A tool for defining and running complex applications with Docker (eg a multi-container application) with a single file.



Docker-Swarm :

A native clustering tool for Docker. Swarm pools together several Docker hosts and exposes them as a single virtual Docker host.

It scale up to multiple hosts.



Basic Docker Commands

Some Basic Docker Commands:

```
// General info
man docker // man docker-run
docker help // docker help run
docker info
docker version
docker network ls

// Images
docker images // docker [IMAGE_NAME]
docker pull [IMAGE] // docker push [IMAGE]

// Containers
docker run
docker ps // docker ps -a, docker ps -l
docker stop/start/restart [CONTAINER]
docker stats [CONTAINER]
docker top [CONTAINER]
docker port [CONTAINER]
docker inspect [CONTAINER]
docker inspect -f "{{ .State.StartedAt }}" [CONTAINER]
docker rm [CONTAINER]
```

Don’t you feel like Samuel Right now ? 😬

DEMO

Docker examples

- SSH into a container
- Build an image
- Running the Container
- Pushing an image

SSH into a container

```
docker pull ubuntu
docker run -it --name ubuntu_example ubuntu /bin/bash
```

Build an Image

```
#
# Super simple example of a Dockerfile
#
FROM ubuntu:latest
MAINTAINER Shivansh "shiv4nsh@gmail.com"

RUN apt-get update
RUN apt-get install -y python python-pip wget
RUN pip install Flask

ADD hello.py /hello.py

WORKDIR /home
```

Dockerfile

```
from flask import Flask
app = Flask(__name__)

@app.route('/')
def hello_world():
    return 'Hello World!'

if __name__ == '__main__':
app.run(host='0.0.0.0')
```

hello.py

Using Command : `docker build -t "internity:dockerfile" .`

Running the container

Command :

```
sudo docker run -p 5000:5000 internity:dockerfile python hello.py
```

Result :

```
shiv4nsh@shiv4nsh-pc:~$ sudo docker run -p 5000:5000 internity:dockerfile python hello.py
 * Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
172.17.0.1 - - [27/Mar/2018 09:07:26] "GET / HTTP/1.1" 200 -
```

Pushing the Docker Image

Tag the image:

```
sudo docker tag internity:dockerfile internity/dockerfile:first-image
```

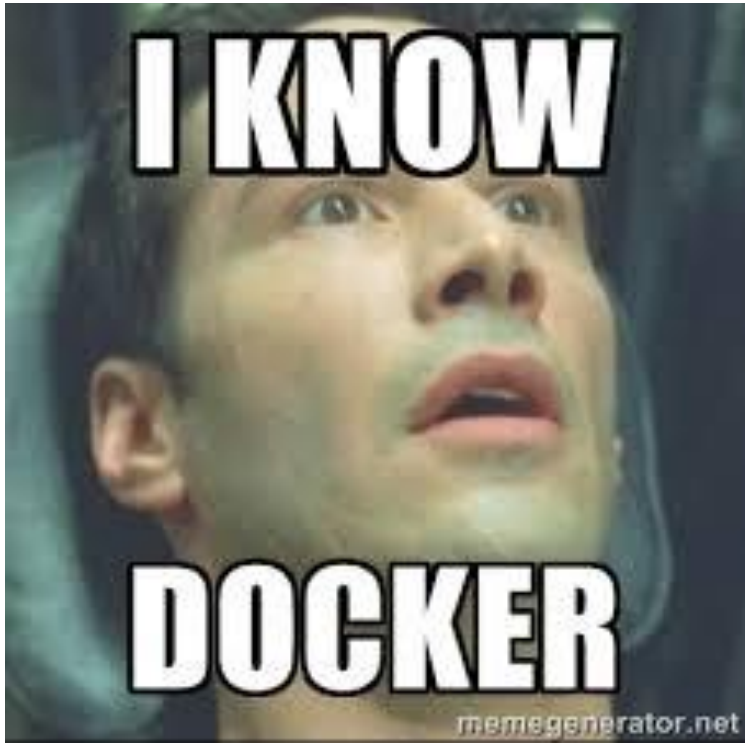
Push the image:

```
shiv4nsh@shiv4nsh-pc:~$ sudo docker push internity/dockerfile:first-image
The push refers to repository [docker.io/internity/dockerfile]
fef4ec338829: Pushed
695645fbdc73: Pushed
34c9ee632abc: Pushing [========>                                          ]  44.97MB/267.5MB
06e5143d5cc9: Pushing [=========================>                         ]  20.02MB/40.14MB
db584c622b50: Pushed
52a7ea2bb533: Pushed
52f389ea437e: Pushed
88888b9b1b5b: Pushed
a94e0d5a7c40: Pushing [===========>                                       ]  25.99MB/112.4MB
```

Resources :

- Awesome Docker (list of Docker resources & projects)
- Docker cheat sheet
- Docker in Practice, The Docker Book (books)
- Docker aliases/shortcuts
- Docker case studies

Do you feel like Neo now ?



ARE THERE
ANY QUESTIONS?

References:

1. Docker Documentation
2. Theodorosploumis presentation.

You can find full code and presentation here:
https://github.com/InternityFoundation/Gurukul-kangri-docker-workshop

Coaching Model :

A **coach**
is a committed listener who enhances self-belief and mental strength.

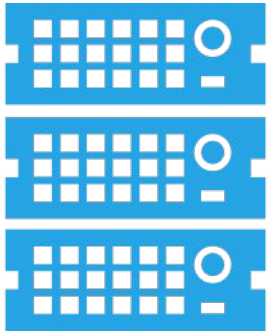
At the same time,
being **coachable** brings this into our life and this makes us unstoppable.

Here comes your reward :-)

Unanth Association

On the account of your patience listening and participation in Internity's program, Internity declares an offer of 10% wave-off on our partner- Unanth Educational Programs.

Internity Summer Internship Industrial Program :



Full Stack Training
With our learning
partners

Soft Skill Development

Real Time Project
&
Coaching

Our Cherishing Experiences

Feedback:

https://internity-workshop.herokuapp.com/

Be Quick ! ! ! or else ...

NO FEEDBACK.....
REALLY!!!! HANG ON A SEC

Thank You