

Academical++, Professional++, Social++

[True Education -> Software Engineering]
[Distinguished Facilitator]

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** This is a department activity. All staff members and students are involved in some or other initiative directly or indirectly.

**Topics covered are not the sole list of activities.

Section I- Background and Description of the achievement

Academical++, Professional++, Social++

If an individual has reached the peak of any one from **Academics**, **Professionalism** or **Society** but has not made remarkable ground for remaining then success dwells in vain.

Value added growth **Academically**, **Professionally** and **Socially** is must for the true balance. The Department of Computer Engineering, FoT. DDU. has established objectives to attain all below for students and faculties.

- **Self development by strong academics**
- **Group development by improved professionalism**
- **Society development by innovative technical solutions**

Section II - Justification

- **Academical++, Strengthening Academics Differently:**
 - MOOC (Massive Open Online Course) Days for M.Tech C.E.
 - Students themselves choose topics for which MOOC seems helping them differently.
 - Total 11 such sessions (Videos) conducted during IV semester 2016_17
 - Students have learnt topics from internal faculties with certain example scenarios but Mooc on the same/similar topic explained the concept differently and hence students gained different insight of the topic learnt.



Microsoft Excel
Worksheet

Section II - Justification

- **Academical++, Strengthening Academics Differently:**

Advanced Digital Signal Processing - Wavelets and Multirate

A	B	C	D
Lecture Name	Professor Name	Makadia Parth	Vaishali Patel
Machine Learning 1	Andrew Ng.	Y	Y
Machine Learning 2	Andrew Ng.	Y	Y
Machine Learning 3	Andrew Ng.	Y	Y
IOT	Dr. Ing. Alexander Radovicic		
Object Representation And Description	Prof. P. K . Biswas	Y	
Object Representation And Description	Prof. P. K . Biswas	Y	Y
Object Representation And Description	Prof. P. K . Biswas	Y	Y
Object Recognition	Prof. P. K . Biswas	Y	Y
Big Data	Youtube Channels	Y	
HDFS Architecture	Rama Krishna	Y	Y
anced Digital Signal Processing - Wavelets and Multi	Prof. V. M. Gadre	Y	Y

List of MOOC Sessions



- Student “Makadia Parth” (Gate Qualified) secured UGC scholarship for his M.Tech.
- He worked on Hadoop File System during dissertation.

Section II - Justification

- **Academical++, Strengthening Academics Differently:**
 - Connecting and aligning Research/Technical Solutions:
 - Student (Junior), who researched on Game Bot, Steganography and wishes to continue AI/NLP is being connected to students (Seniors), who did internship at IIT Bombay on similar topics.
 - Extended work by a team for confidential conversations using security algorithms and techniques; Connecting the past and current students' work.



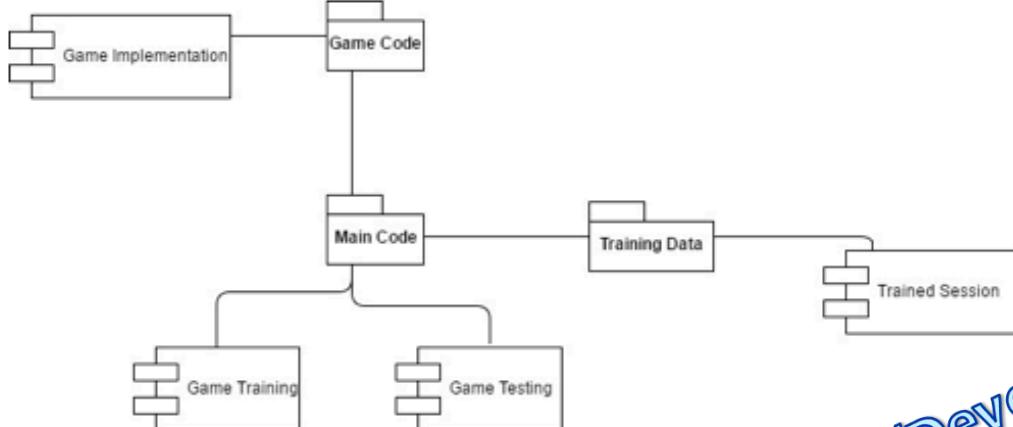
Microsoft Word Document

“You can't **connect** the **dots** looking forward; you can only connect them looking backwards.” - Steve Jobs

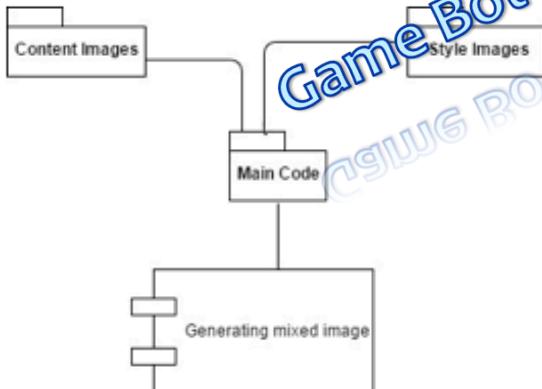
Section II - Justification

GAMEBOT

4. Package Diagram for PONG Game:



5. Package Diagram for Guess the image Game:



GAMEBOT

• **Academical++, Strengthening Academics Differently:**

6. Implementation for PONG Game:

In this project I have used neural network, a powerful biologically-inspired programming paradigm which enables a computer to learn from observational data.

6.1 Platform Description:

1) TensorFlow

[TensorFlow](#) is an open source software library for numerical computation using data flow graphs. Nodes in the graph represent mathematical operations, while the graph edges represent the multidimensional data arrays (tensors) communicated between them.

2) Pygame Library

- [Pygame](#) is a cross-platform set of [Python](#) modules designed for writing [video games](#). It includes [computer graphics](#) and [sound libraries](#) designed to be used with the [Python programming language](#).

6.2 Module Description

1) Game Implementation

- This module provides the gaming environment.

2) Game Training

- This module allows our bot to train on the provided gaming environment by Game Implementation Module.
- This module stores the session of training in form of session file in the Training Data Package.

3) Game Testing

- This module allows uses the trained session to test and to play against humans.

4) Trained Session

- This is a session stored in form of meta data file created by Game Training Module.

Section II - Justification

- **Professional++, Following latest technological trends professionally**
 - For and by Students (From *Identified Learning Sources* - other than faculties)
 - A talk for the next batch by Amazon India selected **Interns**: "Getting ready for interview"
 - Seminar on Oracle ERP, co-operated by Infosys Campus Connect and delivered by Infosys **Industry Expert**
 - Internet of Things (IOT): Interactions of sensors, actuators, hypothetical smartness and programmable models by **Educational Institute**
 - Angular JS session by **Professional Trainers**
 - *Rollout of Foundation Program, developed and designed by Infosys Campus Connect, Success Partners.*



Microsoft Word 97
- 2004 Document



Microsoft Word 97
- 2004 Document

Section II - Justification

- Professional++, Following latest technological trends professionally



Amazon India – Selected Interns
Sharing interview experience

സെമിനാർ & ഇൻ്റീവിഷൻ ഏക്സൈര്ജുസ്



Seminar & Student Interaction on Latest Technologies (ERP, Cloud)

സെമിനാർ & സ്ടുഡന്റ് ഇൻ്റഗ്രേച്യേഷൻ ഓഫ് ഫോറെസ്റ്റ് ടെക്നോളജീസ് (ERP, Cloud)

Section II - Justification

- Professional++, Following latest technological trends professionally



Section II - Justification

- **Professional++, Following latest technological trends professionally**

➤ For and by Faculties

➤ Ownership of expertise, faculties are given roles to play and achieve milestones technically. i.e. setting up hadoop, hbase, latest with .Net, Node/Angular JS, Cloud – Setting up DokuWiki, etc.

➤ Faculties come together for discussion and knowledge sharing about latest trends in software industry.
i.e. Hadoop Eco System Group successfully demonstrated Hadoop and HBase applications.



DokuWiki for content management pertaining to group activities such about exploring Hadoop Eco System.

➤ Systems Team worked to have Hadoop (Pseudo Distributed) ready laboratories based on the provided Software Deployment Document (SVDD).

➤ Total 6 “Let’s learn” session and bookkeeping efforts easily generated 3-5 days¹⁰ Hadoop STTP worth material on DokuWiki.

Section II - Justification

- Professional++, Following latest technological trends professionally

★ Prof. Jigar Pandya

DokuWiki: How to use ??

To: Brijesh S. Bhatt, Sheetal Shah, Prof. Jigar Pandya, Siddharth P. Shah, Prof. Pinkal Chavda, Ashish K. Gor, Jatayu Baxi

DokuWiki: How to use ??

<http://192.168.29.150/cewiki/doku.php?id=wiki:syntax>

Hadoop Installation Setup in Psuedo-Distributed Mode on Linux (CentOS 6.5)

JAVA Installation

- Use "Java -version" to check java version already installed in the machine.
- Latest version of Oracle jdk is preferable.
- If it is not installed, download it from <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-213315.html>

(Linux x64 176.95 MB jdk-8u131-linux-x64.tar.gz)

```
$ tar zxvf jdk-8u131-linux-x64.tar.gz
```

Preferred Location for installation: /usr/java/. Move extracted contents to this directory.

Use command "alternatives --config java" to see the list of all java versions. It will ask to select anyone version as default. Select oracle jdk as default.

(Note : Oracle's RPMs are ignorant of the "alternatives" system. So use following command to solve the problem if alternatives command does not print the recently installed java version.)

```
/usr/sbin/alternatives --install /usr/bin/java java /usr/java/default/bin/java 20000
```

For setting up PATH and JAVA_HOME variables, add following commands to ~/.bashrc file.

Inbox - JigarPandya - DDU April 8, 2017 at 1:07 PM



192.168.29.150/cewiki/doku.php?id=hadoop

Getting Started Latest Headlines Introduction to dat...



cewiki

Trace: · syntax · installation_steps · hadoop

Hadoop Meeting Minutes

Introduction to Hadoop and MapReduce

Steps for Hadoop Installation

1. Standalone Mode Installation

2. Pseudo-Distributed Mode (or Single node cluster) Installation

2. Fully-Distributed Mode (or Multiple node cluster) Installation

Hadoop terminology

Hadoop interface navigation

MapReduce Program WordCount Example

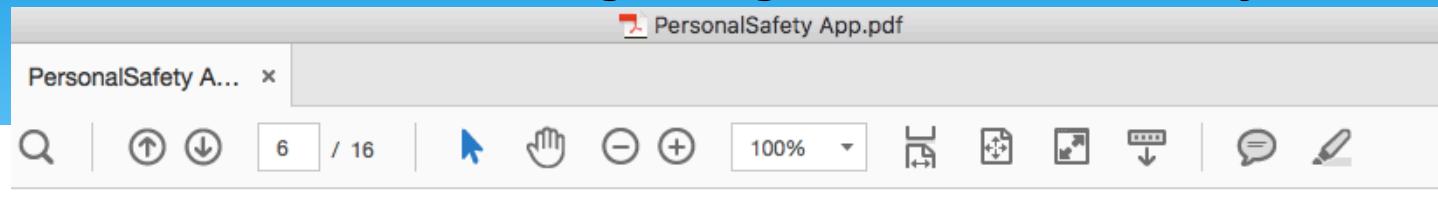
Section II - Justification

- **Social++, Committed for building next generation community**
 - Proposing software solutions year by year on different agenda.
 - Women Safety - Development of a mobile app with all safety concerns pertaining to women.
 - p.s. Industry Leaders examined and acclaimed this efforts.
 - Student, who developed was awarded higher rankings.
 - Growing Together – Supporting Training sessions of basic computer knowledge for non-technical staff and school crowd.



Section II - Justification

- Social++, Committed for building next generation community



- Automatically hides the app on your phone whenever Anti-Theft is activated, so that a thief is not even aware of its presence.
- Have calls and messages forwarded to a different phone. Set preferred contacts whom to send.
- Remote data retrieval: Retrieve call logs, SMS messages, and other personal data from your phone – e.g. before remotely wiping its memory.
- Phone vibrates and screen flashes similar to police lights when the alarm is triggered. Choice of alarm sounds. It will work even if device is in silent mode.
- Find phone using GPS location and get location history.
- White/Black list to control who can use the app via text.

Personal Safety App – Features
Personal Safety App – Features

Section III - Conclusion

- Students get to learn different aspects and purposes from non-traditional sources like MOOC, immediate seniors, interns, professional trainers, industry experts, Educational Institutes, Success Partners.
- Faculties get to develop while teaching and staying with the cutting edge technologies. Expanding the thought process beyond just reading text books, referring same old notes, etc.
- “The goal of education is to manifest the divinity within.”
 - Quoted in book, ‘Saving Humanity: Swami Vivekanand Perspective’

And as understood by current generation, HUMANITY is DIVINITY.

- Hence, by improvising upon Academics, Professionalism and Societal Solutions, we are imparting true education to oneself to save humanity.

References

<https://www.dokuwiki.org/dokuwiki#>

<https://onlinecourses.nptel.ac.in/explorer>

<https://books.google.co.in/books?id=hkzL6loGmEIC>

<https://www.forbes.com/sites/ericjackson/2011/10/05/the-top-ten-lessons-steve-jobs-taught-us/#3f33c4e77bfb>

https://en.wikipedia.org/wiki/RGB_color_model





THANK YOU

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