Project Aladdin

Analytics & Administration





Introduction

✓ In Emertxe online ecosystem, there are three stakeholders:

Student

- Person who is taking up a particular course
- Has a specific goal to achieve (getting a job)
- Need to be notified realtime about performance and constantly drive for higher performance

Mentor

- Responsible for delivering a particular training program
- Class mentor will deliver the class-room activities & ensure all lab activities are done as per the compliance
- Lab mentor will supervise & support students in the lab.

Manager

- Management person to oversee the delivery
- Ensure overall quality & schedule part
- Take corrective actions

✓ At any point in time students & mentors are part of different batches taking up / delivering different subjects



Phases

- ✓ Emertxe Online system is planned to move into implementation in two phases. Each phase will have certain goals & objectives
- ✓ Phase-1 (Goal: Assessment & Analytics)
 - Real-time performance feedback for students with actionable insights. This will use
 as a guide & re-iterate the focus required from students to become job ready
 - Continuous improvement Student, Staff and System
 - Efficiency improvement Centralized system, remove process delays
- ✓ Phase-2 (Goal: Center management)
 - Workflow automation Student admission to exit
 - Student communication Placements, Ticketing system etc.
 - Fee collection Account management, student reminder etc.

This document only has details about Phase-1. Center management taken be taken as the next step of the project.



Assessment system Objectives

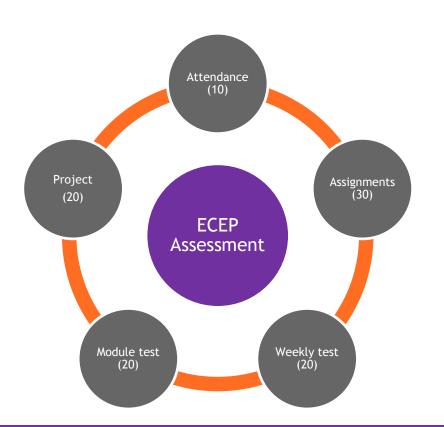
- ✓ Continuous assessment Every day
- ✓ Holistic Have multiple parameters
- ✓ Aligned with goal of becoming job ready
- ✓ Continuous improvement
- Do course corrections as necessary
- ✓ Motivate, Inspire and Achieve



Have an assessment system that is not based on theoretical approach, but practically understand where an individual stands. It should also point him / her to points to focus on improvements.



Components



- ✓ Attendance: How regular you are?
- ✓ Weekly test: Technical aptitude
- ✓ Assignments: Logical/Analytical
- ✓ Module test: Concept/Application
- ✓ Project: Real-time usage

Numbers mentioned within brackets provides the weightage, overall it is integrated to 100 points / marks.



✓ Attendance (10 points): Requirements

- Batch -> Person -> Date wise option to enter attendance
- Integration of calendar to backtrack attendance data
- Class-room (50%) and Lab-session (50%) options
- Provision to record late sessions. Three late sessions to be recorded as one absent. Pro-rate them for 10 point weightage

✓ Weekly test (20 points): Requirements

- Weekly tests are conducted using online assessment system (http://test.emertxe.com) where weekly test & module test results are stored
- The online portal should fetch this information and automatically populate it against a student / batch / subject. REST API & OAuth support available from the online assessment system. Pro-rate them for 20 point weightage

✓ Module test (20 points): Requirements

- Module tests are conducted using online assessment system
- It will be corrected and entered into the system by mentors
- Similar to weekly test, marks has to be fetched from assessment system using REST API / OAuth and pro-rate them for 20 point weightage



- ✓ Assignments (30 points): Requirements
 - Each assignment is categorized with three level complexity:
 - Easy (2)
 - Medium (3)
 - Hard (5)
 - Each assignment will be evaluated based on following factors:
 - Comments in the code (1)
 - Modularity (1)
 - Output (4)
 - Ease of use (1)
 - Viva (3)
 - Numbers mentioned within brackets are weightages assigned, should eventually pro-rate them for 30 point weightage



- ✓ Project (20 points): Requirements
 - Project demo (10 points)
 - Feature complete (5)
 - Viva (3)
 - Exception / Error handling (1)
 - Extra feature handling (1)
 - Project presentation (10 points)
 - Introduction (1)
 - Visual support (1)
 - Verbal support (2)
 - Movements / Gestures (2)
 - Eye contact (1.5)
 - Organization (1.5)
 - Summary (1)



✓ All the above mentioned categories should eventually add up to 100 points average per subject

Depending on that points, each student need to be categorized into 5 different zones as mentioned in the right side Green Zone (Value >= 70)

Orange Zone (Value < 70 && > 60)

Yellow Zone (Value < 60 && > 50)

Red Zone (Value < 50 && >40)

Black Zone (Value < 40)

- Provision to be provided to email this report to individual students automatically
- ✓ This leads to different roles of this system which is mentioned as follows.

 Appropriate privileges to be provided detailed in next slide.
 - Manager / Admin
 - Mentor / Faculty
 - Student



✓ Role: Admin / Manager

- Create course (Course -> Batch -> Subject / Module -> Assessment item -> Student hierarchy)
- Create subject (Compliance sheet)
- Provision to enter plan for a particular subject (Number of days, Chapter, Topics & Sub-topics, Duration, Topic wise class-work, Assignments)
- Provision to modify the plan
- Create new batch
- Add students into batch by importing their contact information
- Automated emails students on new login creation
- Provision to close a particular subject
- Provision to close the course once all subjects are completed
- Assign a particular subject to a particular mentor (along with whole plan)
- Move students between different batches
- Provision to mark student status when they discontinue / get placed
- Merge different batches
- Provision to add new logins for mentors (Class mentor & Lab mentor)
- Class mentor will have complete access. Lab mentor will have read-only access to class related parameters (Class attendance, Daily schedule)
- Verify & approve / reject assessments submitted by mentor / faculty
- Automated email notification to mentors when it is accepted / rejected
- Automated email notification to individual students once approval is done along with detailed report sent as attachment

✓ Role: Admin / Manager

- Provision to add / modify / delete various assessment categories on a subjectto-subject basis (ex: provision to modify number of assignments in a subjects and its complexity)
- Provision to add / modify / delete weightage of assessments on a subject-tosubject basis (ex: remove projects, increase weightage of module test to 40)
- Provision to automatically adjust schedule (Holiday / Misday / Hit-day) as per the course plan
- View current status of various batches (Manager dashboard):
 - ✓ Total number of batches running currently with overall compliance %
 - ✓ Actual start date and end date of each module & overall time taken for a batch
 - √ Various assessment information across batches & subjects
 - ✓ Mentor assignments across various batches & compliance %



✓ Role: Mentor / Faculty:

- Provision to choose a particular subject and a particular batch
- Enter all assessment information across various categories (ex: assignment)
- Entering attendance should be made easier as it is done very frequently
- Provision to mark a particular day is hit-day / miss-day / holiday
- Provision to view lab assignment progress
- Submit subject / batch wise consolidated assessment for verification with manager
- In case of rejection, provision to look into the reason, fix and re-submit for approval
- Provision to enter subjective comments for a particular student to share in the report

Mentor Dashboard:

- ✓ Total number of classes currently being handled
- ✓ Assessment components Total
- ✓ Assessment components Assessed
- ✓ Assessment components Pending
- √ Manager approval / rejection status
- ✓ Overall compliance %



- ✓ Role: Student
 - Real-time digital analytics and assistance:
 - ✓ Alert when a particular item is assigned (Assignments, Projects, Tests)
 - ✓ Alert when a student when he is ahead / lagging plan
 - ✓ Alert when a student absent for a day
 - ✓ Individual level specific recommendations for strengths & improvement areas in each assessment parameter
 - View subject wise consolidated assessment (Out of 100)
 - Navigate individual elements (ex: Assignment) and see how much he has scored
 - Download consolidated reports per module basis
 - Download final course level report with all module assessment details
 - Alert to parent when he is absent for more than two days



THANK YOU