Functional Dependency for Assignment Submission Portal

# Date: 23/03/2017

## Constraints at User Level

1. A **User** must be either a **Teacher** or a **Student**.
2. A **User** must have a good **Passphrase**.
3. A **User** can change his/her **Passphrase** only once in a week time.
4. A **Student** can have only one **User** Account.
5. A **Teacher** can have only one **User** Account.
6. A **Student** must be able to submit for an **Assignment** only before the **Deadline**.
7. A **Student’s submission** will be accounted only once for an **Assignment** (If any new submission is done for the assignment, the previous record must be erased and new one must only exist).
8. A **Student** cannot submit two **Assignments** at the same time.
9. A **Student** can submit only **Assignments** assigned for his/her **Batch**.
10. A **Student** if hasn't submitted an **Assignment** until the **Deadline**, he cannot be allotted **Grade** for that **Assignment**.
11. A **Teacher** can only assign an **Assignment** or **Grade** to a **Student**.
12. A **Teacher** must teach the **Course** for which he/she is creating an **Assignment**.
13. A **Teacher** can only **Grade** for those **Assignment** created by him/her.
14. A **Teacher** must not **Grade** an **Assignment** before the **Deadline**.
15. A **Teacher** must only be allowed to change the **Deadline** for an **Assignment** that is assigned by him/her.
16. A **Course** must exist for its **Assignment** to be created.
17. An **Assignment**’s work time (difference between Creation and Deadline) in days must not be less than 3 times the **Credits** allotted for that assignment.
18. An **Assignment** can be graded only once for a **Student**, but the **Teacher** can only change the **Grade**.
19. A **Student’s Timeline** must show the **Student**, **Submission and Review Status** for all **Assignments** associated with priority based on **Deadline.**
20. A **Student** cannot be given more than 50% **Credits** if the **Plagiarism check** is above a Set Limit.
21. As soon as the Average **Plagiarism** **measure** of a **Student** goes above Set Limit, he/she will be warned.

## Functional Dependencies Formed from Dependency Constraints in the above Set

**Teacher :**

TID->Name

TID->Dept

TID->Email

TID->Date Of Joining

TID->Date of Transfer

**Course :**

CID->Course Name

CID->Dept

CID->Total Credits

**Student :**

SID->Name

SID->Date of Births

SID->Date of Joining

SID->Date of Pass out

SID->Email

SID->Batch

**User :**

ID->Password

ID->Date of Change

**Assignment :**

AID->Assignment name

AID->Teacher ID (TID)

AID->Batch

AID->Credits

AID->Creation DateTime

AID->Deadline Datetime

AID->Course ID

**Submissions :**

SID,AID->DateTime of Submission

**Grading :**

SID,AID->Credits Obtained

SID,AID->Plagrism Measure

**Student Timeline :**

SID,AID->Submission Status

SID,AID->Revision Status