**N # 2 INSTRUCTIONS**

**App = Application = Fieldwork = Workflow = Job**

**Course = AppTemplate**

**Step = Task = Form**

1. Scenarios (Examples)
2. Database TABLES
3. User ACTIONS/TRANSACTIONS

**(1). 1. Scenarios (Examples)**

|  |
| --- |
| **App “Standard Fieldwork” (FW)**  Step1: [participating users = secretary] secretary fill-in form f1 to create/generate an App(enter student email, select Course, Faculty, Chair, Dean), the system automatically generates a message from Secretary to the primary user of the NEXT step (Student) and, if it’s an urgent step, it also emails student login info  Step 2: [participating users = student] Student fill-in the (fieldwork) form f2 including Supervisor info, the system automatically generates an urgent message from Student to the primary user of the NEXT step (Faculty) and also emails faculty login info  Step 3: [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info.  Step 4: [participating users = supervisor] Supervisor fill-in the form f4 to edit/approve LO, the system automatically generates a message from Supervisor to Faculty  Step 5: [participating users = faculty] Faculty will wait for a reply from the Supervisor with approval of LO in form f3, then finish this step by approving LO which leads to the system to send a message from the Faculty to the primary user of the NEXT step (Chair) and also emails Chair login info.  Step 6: [participating users = Chair] Chair fill-in the form f5 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info.  Step 7: [participating users = Dean] Dean fill-in the form f6 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. |

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| --- |
| **App “Independent Study” (IS)**  Step1: [participating users = secretary] secretary fill-in form f1 to create/generate an App(enter student email, select Course, Faculty, Chair, Dean), the system automatically generates an urgent message from Secretary to the primary user of the NEXT step (Student) and also emails student login info  Step 2: [participating users = student] Student fill-in the (fieldwork) form f2, the system automatically generates an urgent message from Student to the primary user of the NEXT step (Faculty) and also emails faculty login info  Step 3\*: [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Chair) and also emails Chair login info.  Step 4: [participating users = Chair] Chair fill-in the form f5 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info.  Step 5: [participating users = Dean] Dean fill-in the form f6 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. |

**All steps in this IS except for step 3 are the same as in FW. Step 3 in IS is very similar to step 3 and 5 in FW.**

Officially:

X1: First, the admin creates stepTemplates (templates for steps).

X2: Then, he can use those to create the two COURSES which are defined as appTemplates (see in appTemplate\_T below)

Step -1: A user (secretary) can generate an Application for a course (at this point: “Fieldwork” or “Independent Study”) based on an appTemplate (when selecting a course, remember **a course is an app template**)

Step-2: Student fills-in the form …

**HOWEVER:**

**First, for NOW assume that the stepTemplates and appTemplates are ALREADY created and are stored in the DB tables and files: /form/formSecretary.php [these are standard codes with no values or default values]**

**When an app is generated its steps are generated by copying the codes from a stepTemplate file (/form/formSecretary.php) into a new file (/steps/0000000001.txt) where the name 0000000001 is the ID of the given step. This file 0000000001.txt must be able to store the data filled-in in the form. So, it can be in JSON or TEXT format. You can also create a MySQL table for each form( secForm\_T, studentForm\_T, ….) if you’d like to store the form data in a MySQL table.**

**(2). Database TABLES**

**1.1 List of (Editable) Tables:**

|  |  |  |
| --- | --- | --- |
| **dataType\_T** | (\*) |  |
| dataType\_id | dataType\_title | dataType\_info |
| 1 | Form | A web form to be filled-in |
| 2 | File | A file attached to a step or owned by a user |
| 3 | Database | Fields, tables, in database |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **data\_T** |  |  |  |  |  |  |
| data\_id | data\_location | data\_type | data\_modifier | data\_changed | data\_owner | data\_created |
| 0101 | /form/formSecretary.php | 1 | 001 | 2035-01-19 09:13:07 | 001 | 2019-01-19 09:13:07 |
| 0102 | /form/formStudent.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0103 | /form/formFaculty.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0104 | /form/formSupervisor.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0105 | /form/formChair.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0106 | /form/formDean.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0107 | /form/formCareer.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0108 | /form/formFaculty2.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0109 | /form/formFaculty3.php | 1 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0110 | /upload/ABC-transcript.docx | 2 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0111 | /upload/LearningObjectives1.docx | 2 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |
| 0112 | /upload/ LearningObjectives2.docx | 2 | 001 | 2025-01-19 05:10:28 | 001 | 2019-01-19 05:10:28 |

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| --- | --- | --- |
| **stepType\_T** |  |  |
| stepType\_id | stepType\_title | stepType\_info |
| 1 | urgent | step with high priority that needs to get done asap |
| 2 | normal | step with normal priority |

|  |  |  |
| --- | --- | --- |
| **stepStatus\_T** |  |  |
| stepStatus\_id | stepStatus\_title | stepStatus\_info |
| 1 | Approved | step that has been done, can’t be changed any more |
| 2 | In Progress | the step that is being worked on (at least one user is still in progress) |
| 3 | Rejected | step that has at least one user rejected |
| 4 | Deleted | not visible any more |

|  |  |  |
| --- | --- | --- |
| **templateStatus\_T** |  |  |
| templateStatus\_id | templateStatus\_title | templateStatus\_info |
| 1 | ready | template is ready to be used |
| 2 | not-ready | the template that is not ready or should not be used now |
| 3 | deleted | not visible any more |

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| --- | --- | --- | --- | --- |
| **stepTemplate\_T** |  |  |  |  |
| stepTemplate\_id | stepTemplate\_title | stepTemplate\_instructions | templateStatus\_id | stepTemplate\_location |
| 0001 | Secretary Form (f1) | [participating users = secretary] secretary fill-in form f1 to create/generate an App(enter student email, select Course, Faculty, Chair, Dean), the system automatically generates an urgent message from Secretary to the primary user of the NEXT step (Student) and also emails student login info | 1 | /form/formSecretary.php |
| 0002 | Student Form (f2) | [participating users = student] Student fill-in the (fieldwork) form f2 including Supervisor info, the system automatically generates an urgent message from Student to the primary user of the NEXT step (Faculty) and also emails faculty login info | 1 | /form/formStudent.php |
| 0003 | Faculty 1 Form (f3) | [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info. | 1 | /form/formFaculty1.php |
| 0004 | Supervisor Form (f4) | [participating users = supervisor] Supervisor fill-in the form f4 to edit/approve LO, the system automatically generates a message from Supervisor to Faculty | 1 | /form/formSupervisor.php |
| 0005 | Faculty 2 Form (f3) | [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info. | 1 | /form/formFaculty2.php |
| 0006 | Chair Form (f5) | [participating users = Chair] Chair fill-in the form f5 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. | 1 | /form/formChair.php |
| 0007 | Dean Form (f6) | [participating users = Dean] Dean fill-in the form f6 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. | 1 | /form/formDean.php |
| 0008 | Faculty 3 Form (f3) | [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info. | 1 | /form/formFaculty3.php |

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| --- | --- | --- |
| **stepTemplateDetails\_T** | (may not used) |  |
| stepTemplate\_id | userRole\_id | dataType\_id |
| 0001 | 8 | 4 |
| 0002 | 9 | 4 |
| 0003 | 5 | 4 |
| 0004 | 7 | 5 |
| 0005 | 5 | 5 |
| 0006 | 4 | 5 |
| 0007 | 3 | 4 |
| 0008 | 5 | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **appTemplate\_T** | **(course**) |  |  |
| appTemplate\_id | appTemplate\_title | appTemplate\_instructions | templateStatus\_id |
| 001 | Fieldwork | Secretary => Student=> Faculty => Supervisor => Faculty => Chair => Dean | 1 |
| 002 | Ind. Study | Secretary => Student=> Faculty => Chair => Dean | 1 |

|  |  |  |
| --- | --- | --- |
| **appTemplateDetails\_T** | **(course**) |  |
| appTemplate\_id | stepTemplate\_id | app\_stepOrder |
| 001 | 0001 | 1 |
| 001 | 0002 | 2 |
| 001 | 0003 | 3 |
| 001 | 0004 | 4 |
| 001 | 0005 | 5 |
| 001 | 0006 | 6 |
| 001 | 0007 | 7 |
| 002 | 0001 | 1 |
| 002 | 0002 | 2 |
| 002 | 0008 | 3 |
| 002 | 0006 | 4 |
| 002 | 0007 | 5 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **step\_T** |  |  |  |  |  |  |  |  |
| step\_id | step\_status | step\_title | step\_instructions | step\_location | step\_type | step\_owner | step\_deadline | step\_created | |
| 0000000001 | 1 | Secretary Form (f1) | [participating users = secretary] secretary fill-in form f1 to create/generate an App(enter student email, select Course, Faculty, Chair, Dean), the system automatically generates an urgent message from Secretary to the primary user of the NEXT step (Student) and also emails student login info | /steps/0000000001.php | 1 | 002 | 2019-01-19 05:10:28 | 2019-01-19 05:10:28 | |
| 0000000002 | 1 | Student Form (f2) | [participating users = student] Student fill-in the (fieldwork) form f2 including Supervisor info, the system automatically generates an urgent message from Student to the primary user of the NEXT step (Faculty) and also emails faculty login info | /steps/0000000002.php | 1 | 002 | … |  | |
| 0000000003 | 1 | Faculty 1 Form (f3) | [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info. | /steps/0000000003.php | 1 | 002 |  |  | |
| 0000000004 | 1 | Supervisor Form (f4) | [participating users = supervisor] Supervisor fill-in the form f4 to edit/approve LO, the system automatically generates a message from Supervisor to Faculty | /steps/0000000004.php | 1 | 002 |  |  | |
| 0000000005 | 1 | Faculty 2 Form (f3) | [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info. | /steps/0000000005.php | 1 | 002 |  |  | |
| 0000000006 | 1 | Chair Form (f5) | [participating users = Chair] Chair fill-in the form f5 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. | /steps/0000000006.php | 1 | 002 |  |  | |
| 0000000007 | 1 | Dean Form (f6) | [participating users = Dean] Dean fill-in the form f6 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. | /steps/0000000007.php | 1 | 002 |  |  | |
| 0000000008 | 1 | Secretary Form (f1) | [participating users = secretary] secretary fill-in form f1 to create/generate an App(enter student email, select Course, Faculty, Chair, Dean), the system automatically generates an urgent message from Secretary to the primary user of the NEXT step (Student) and also emails student login info | /steps/0000000008.php | 2 | 003 | 2019-01-19 09:13:07 | 2019-01-19 09:13:07 | |
| 0000000009 | 1 | Student Form (f2) | [participating users = student] Student fill-in the (fieldwork) form f2 including Supervisor info, the system automatically generates an urgent message from Student to the primary user of the NEXT step (Faculty) and also emails faculty login info | /steps/0000000009.php | 2 | 003 | … |  | |
| 0000000010 | 1 | Faculty 1 Form (f3) | [participating users = faculty] Faculty fill-in form f3 to specify the Learning Outcomes (LO), the system automatically generates a message from Faculty to the primary user of the NEXT step (Supervisor) and also emails Supervisor login info. | /steps/0000000010.php | 2 | 003 |  |  | |
| 0000000011 | 1 | Chair Form (f5) | [participating users = Chair] Chair fill-in the form f5 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. | /steps/0000000011.php | 2 | 003 |  |  | |
| 0000000012 | 1 | Dean Form (f6) | [participating users = Dean] Dean fill-in the form f6 approving or rejecting, the system automatically generates a message from Chair to Dean and also emails Dean login info. | /steps/0000000012.php | 2 | 003 |  |  | |

# a step is done/completed when step\_status =1 and when all of its parts (stepPart\_status =1 in **stepDetails\_T** ) by all involved users are done.

|  |  |  |  |
| --- | --- | --- | --- |
| **stepDetails\_T** |  |  |  |
| step\_id | user\_id | data\_id | stepPart\_status |
| 0000000001 | 002 | none | 1 |
| 0000000002 | 003 | 0110 | 1 |
| 0000000003 | 004 | 0111 | 1 |
| 0000000004 | 005 | none | 1 |
| 0000000005 | 006 | none | 1 |
| 0000000006 | 007 | none | 1 |
| 0000000007 | 008 | none | 1 |
| 0000000008 | 012 | none | 1 |
| 0000000009 | 003 | 0110 | 1 |
| 0000000010 | 014 | 0112 | 2 |
| 0000000011 | 015 | none | 2 |
| 0000000012 | 016 | none | 2 |

# if every user is done with every data (all stepPart\_status =1, with the same step\_id) then usually the step is done/completed which leads to setting step\_status =1 in step\_T table;

|  |  |  |
| --- | --- | --- |
| **appType\_T** |  |  |
| appType\_id | appType\_title | appType\_info |
| 1 | urgent | app with high priority that needs to get done asap |
| 2 | normal | app with normal priority |

|  |  |  |
| --- | --- | --- |
| **appStatus\_T** |  |  |
| appStatus\_id | appStatus\_title | appStatus\_info |
| 1 | Done | app that has all of its steps done/approved |
| 2 | In Progress | app that has at least one step NOT done/approved |
| 3 | Deleted | not visible any more |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **app\_T** |  |  |  |  |  |  |  |
| app\_id | appStatus\_id | app\_title | app\_instructions | appType\_id | app\_deadline | app\_created | app\_owner |
| 000001 | 1 | Fieldwork | Secretary => Student=> Faculty => Supervisor => Faculty => Chair => Dean | 2 | 2019-01-19 05:10:28 | 2019-01-19 05:10:28 | 002 |
| 000002 | 2 | Ind. Study | Secretary => Student=> Faculty => Chair => Dean | 1 | 2019-01-19 05:10:28 | 2019-01-19 05:10:28 | 012 |

# a app is done/completed when app\_status =1

|  |  |  |
| --- | --- | --- |
| **appDetails\_T** |  |  |
| app\_id | step\_id | app\_stepOrder |
| 000001 | 0000000001 | 1 |
| 000001 | 0000000002 | 2 |
| 000001 | 0000000003 | 3 |
| 000001 | 0000000004 | 4 |
| 000001 | 0000000005 | 5 |
| 000001 | 0000000006 | 6 |
| 000001 | 0000000007 | 7 |
| 000002 | 0000000008 | 1 |
| 000002 | 0000000009 | 2 |
| 000002 | 0000000010 | 3 |
| 000002 | 0000000011 | 4 |
| 000002 | 0000000012 | 5 |

# if every step is done (all step\_status =1, with the same app\_id) then usually the app is done/completed which leads to setting app\_status =1 in app\_T table;

**2.2 List of MySQL commands to CREATE tables and INSERT data (in 2.1):**

<please put here MySQL commands needed to create and insert data in 2.1, you should also put these in a db.txt file so that you can easily recreate them later>

For example:

CREATE TABLE ` **userRole\_T**` (

` userRole\_id` int(3) NOT NULL AUTO\_INCREMENT,

` userRole\_title` varchar(50) NOT NULL,

` userRole\_info` varchar(255) NOT NULL,

PRIMARY KEY (`userRole\_id`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO\_INCREMENT=1 ;

…

**(3). User ACTIONS/TRANSACTIONS**

**Step TEMPLATE**

* **View all stepTEMPLATEs**
* **(Select and) Delete a stepTEMPLATE [change its status to “Deleted”]**
* **Create a new stepTEMPLATE**
* **(Select and) Edit a stepTEMPLATE**
* **Deactivate a stepTEMPLATE [change its status to “Not-ready”]**
* **Activate a stepTEMPLATE [change its status to “Ready”]**

**App TEMPLATE**

* **View all appTEMPLATEs**
* **(Select and )Delete a appTEMPLATE**
* **Create a new appTEMPLATE**
* **(Select and) Edit a appTEMPLATE**
* **Deactivate a appTEMPLATE**
* **Activate a appTEMPLATE**

**STEP**

* **View all steps**
* **(Select and) Delete a step**
* **Create a new step**
* **(Select and) Edit a step**
* **Pause a step**
* **Resume a step**
* **Finish a step [check if all parts are complete then change its status to “done”, lock all data]**

**APP**

* **View all apps**
* **(Select and ) Delete a app**
* **Create a new app**
* **(Select and) Edit a app**
* **Pause a app [change its status to “Paused”]**
* **Resume a app [change its status to “Progress”]**
* **Finish a app [check if all parts are complete then change its status to “done” , lock all data]**

**DATA**

* **View all data belonging to this user (in data\_T, codes in “dataAllView.php”)**
* **View data belonging to this user with filters (in data\_T, …)**
* **Add a new data (add a new row to data\_T, codes in “dataAdd.php”)**
* **Delete a data (delete a row in data\_T, …)**
* **Edit a data belonging to this user (codes in “a1-dataOneEdit.php”)**
* **View all data (in data\_T, codes in “dataAllView.php”)**
* **View all data with filters (in data\_T, …)**
* **Select one and Edit a data (fields in a row from data\_T, codes in “dataAllEdit.php”)**