

1.1 SCHEDULE FLOW

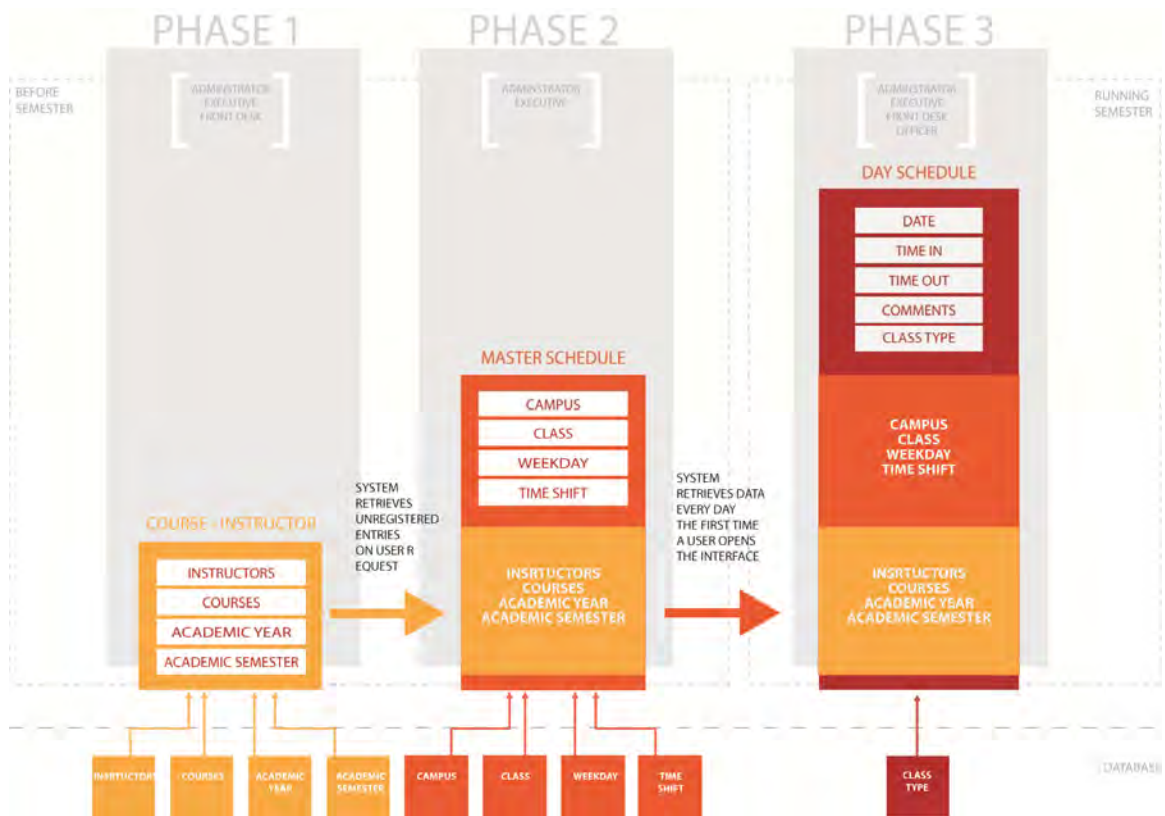


Figure 2.1 FORMAL SCHEDULE FLOW

1.1.1 COURSES & INSTRUCTORS

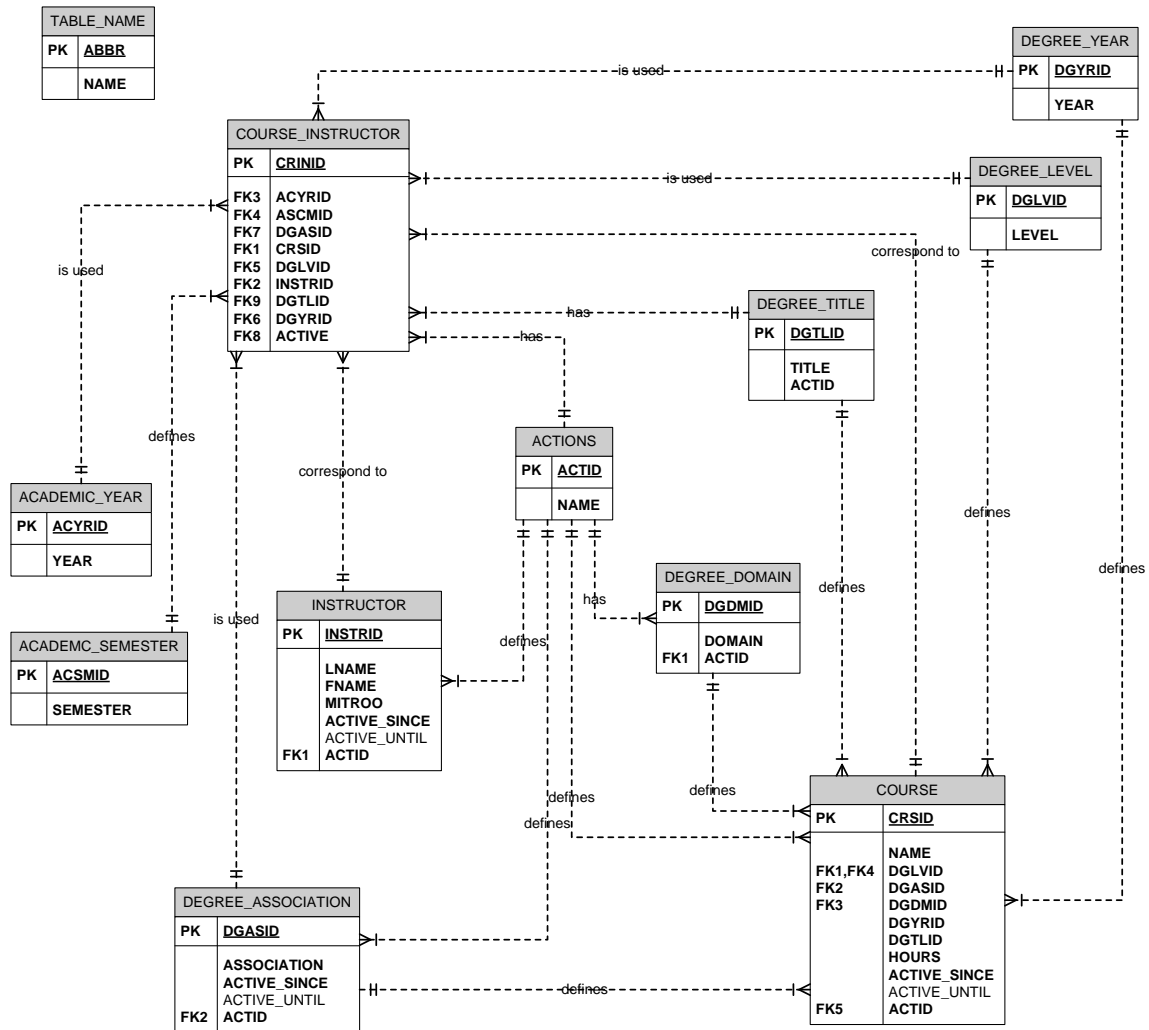


Figure 2.2 DB DESIGN - COURSES & INSTRUCTORS ERD

1.1.2 MASTER SCHEDULE

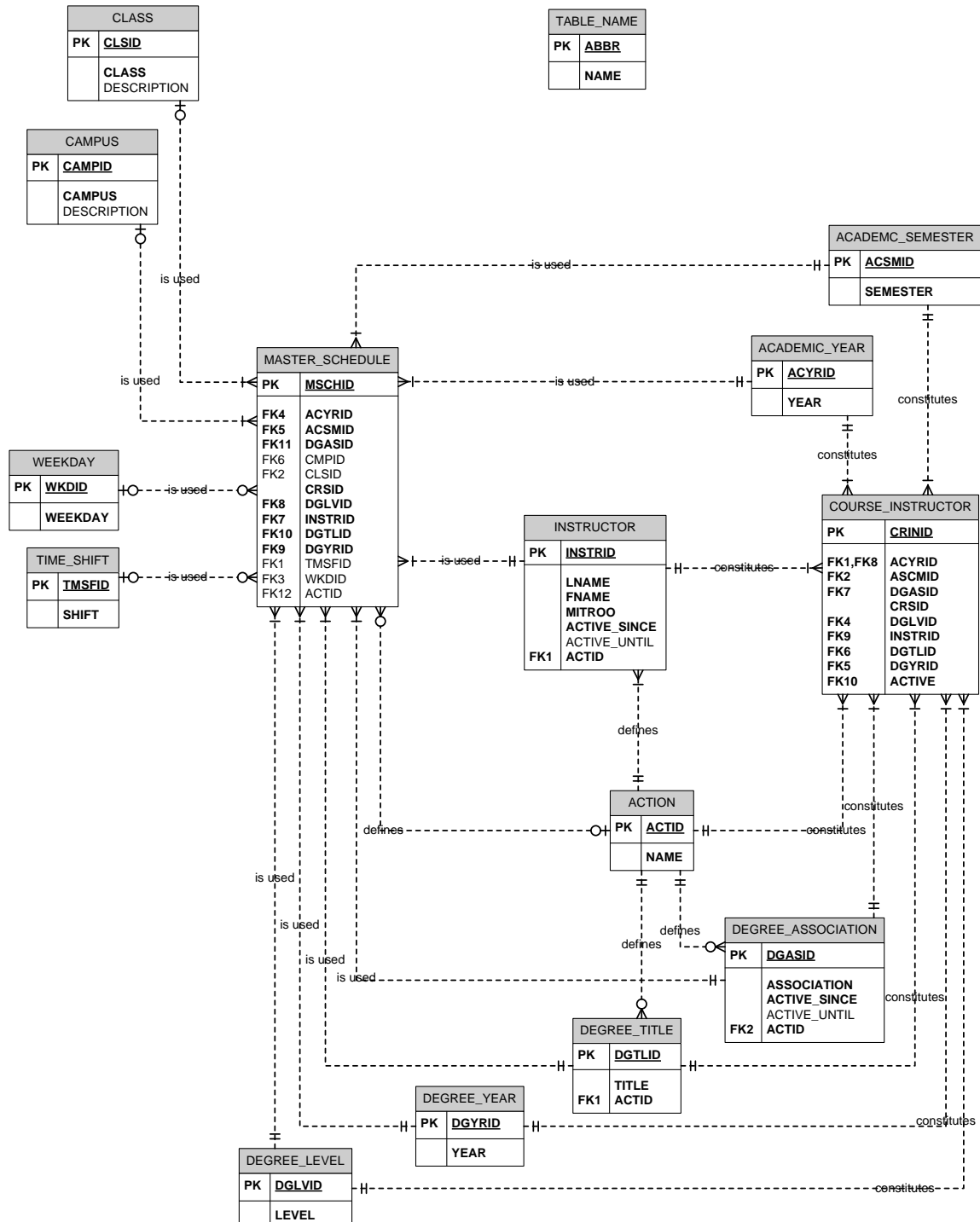


Figure 2.3 DB DESIGN - MASTER SCHEDULE ERD

1.2 DAY SCHEDULE

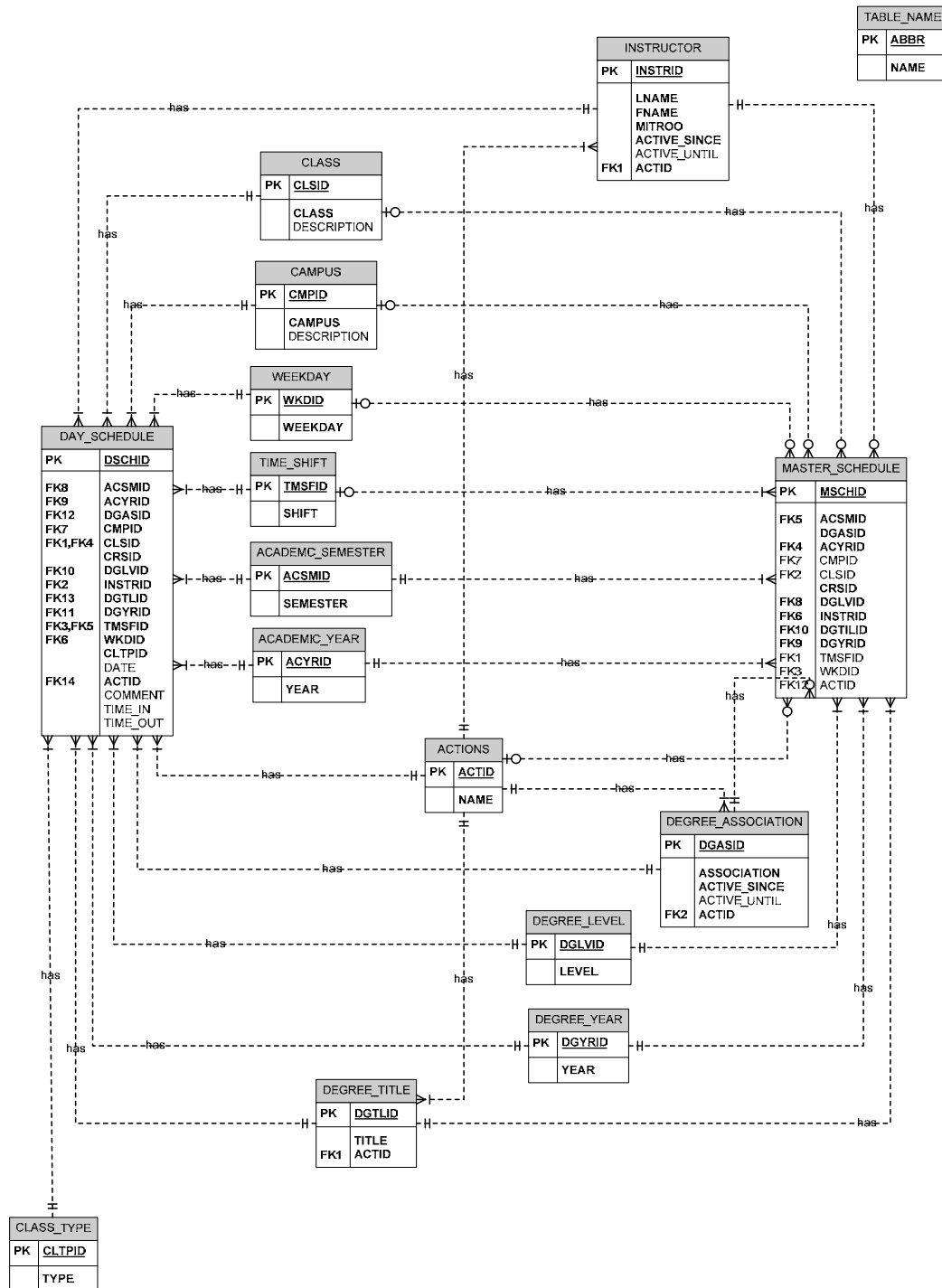


Figure 2.4 DB DESING - DAY SCHEDULE ERD

1.3 DATABASE ENTITIES- SCHEDULE

Academic Semester

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
acsid	ACADEMIC SEMESTER ID	CHAR(1)	A, B	✓		PRIMARY		
semester	SEMESTER SEMESTER	VARCHAR(30)	SEMESTER A	✓		actm_sem_uniq		

Figure 2.5 DB ENTITY - ACADEMIC SEMESTER

Academic Year

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
acyrid	ACADEMIC YEAR ID	INT(4)	2010, 2011	✓		PRIMARY		
year	ACADEMIC YEAR	INT(4)	2010, 2011	✓		acyl_yr_unq		

Figure 2.6 DB ENTITY - ACADEMIC YEAR

Active

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
actid	ACTIVE ID	CHAR(1)	Y, N	✓		PRIMARY		
name	ACTIVE ID	VARCHAR(3)	YES, NO			act_nm_unq		

Figure 2.7 DB ENTITY - ACTIVE

Class

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
clsid	CLASS ID	INT(3)	1, 43, 87	✓	✓	PRIMARY		
class	CLASS NAME	VARCHAR(5)	0.12, 3.11, 4.05	✓				
description	DESCRIPTION	TEXT	'LAB', 'NOTES'					

Figure 2.8 DB ENTITY - CLASS

Class Type

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
cltoid	CLASS TYPE	CHAR(1)	SCH, EXT, MRP	✓		PRIMARY		
type	TYPE	VARCHAR(10)	SCHEDULED, EXTENSION	✓		cltp_tp_unq		

Figure 2.9 DB ENTITY - CLASS TYPE

Campus

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
cmpid	CAMPUS ID	CHAR(1)	A, K, S	✓		PRIMARY		
campus	CAMPUS NAME	VARCHAR(30)	AMALIAS, SKOUFOU	✓		cmp_cmp_unq		
description	DESCRIPTION	TEXT	ADDRESS, 'NOTES'					

Figure 2.10 DB ENTITY - CAMPUS

Course

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
crsid	COURSE ID	INTEGER	356, 5677, 23	✓	✓	PRIMARY	<u>COURSE</u>	<u>COURSE</u>
name	COURSE NAME	VARCHAR(150)	'ADVANCED DATABASE APPLICATIONS'	✓				
dglvid	DEGREE LEVEL ID	CHAR(1)	B, M, P	✓		fk1_crs_dglvid	degree_level	dglvid
dgasid	DEGREE ASSOCIATION ID	VARCHAR(5)	GREW, IUKB	✓		fk2_crs_dgasid	degree_association	dgasid
dgdmid	DEGREE DOMAIN ID	VARCHAR(5)	ENG, PSY, ECON	✓		fk3_crs_dgdmid	degree_domain	dgdmid
dyrid	DEGREE YEAR ID	INT(1)	1, 2, 3	✓		fk4_crs_dyrid	degree_year	dyrid
dglid	DEGREE TITLE ID	VARCHAR(8)	INTERNET ENGINEERING & WEB MANAGEMENT	✓		fk5_crs_dglid	degree_title	dglid
hours	COURSE HOURS	INT(3)	45, 80, 70	✓				
active_since	ACTIVE SINCE	DATE	01-01-2001, 01-06-2005	✓				
active_until	ACTIVE UNTIL	DATE	01-01-2001, 01-06-2005	✓				
actid	ACTIVE ?	CHAR(1)	Y, N	✓		fk6_crs_actid	actions	actid

Figure 2.11 DB ENTITY - COURSE

Course-Instructor

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
crnid	COURSE-INSTRUCTOR ID	INTEGER	543, 554, 23	✓	✓	PRIMARY	<u>COURSE_INSTRUCTOR</u>	<u>COURSE_INSTRUCTOR</u>
acyrid	ACADEMIC YEAR ID	INT(4)	2011, 2012	✓		fk01_cin_acyrid	academic_year	acyrid
acsmid	ACADEMIC SEMESTER ID	CHAR(1)	A, B	✓		fk02_cin_acsmid	academic_semester	acsmid
dgasid	DEGREE ASSOCIATION ID	VARCHAR(5)	IUKB, SUNNY, GREW	✓		fk04_cin_dgasid	degree_association	dgasid
crsid	COURSE ID	INT(3)	43, 554	✓		fk05_cin_crsid	course	crsid
dglvid	DEGREE LEVEL ID	CHAR(1)	B, M, P	✓		fk06_cin_dglvid	degree_level	dglvid
instid	INSTRUCTOR ID	INTEGER	43, 554	✓		fk07_cin_instid	instructor	instid
dgdmid	DEGREE DOMAIN ID	VARCHAR(5)	COMP, IEAWM, PSY	✓		fk08_cin_dgdmid	degree_domain	dgdmid
dyrid	DEGREE YEAR ID	INT(1)	1, 3, 2	✓		fk09_cin_dyrid	degree_year	dyrid
active	ACTIVE ID	CHAR(1)	Y, N	✓				

Figure 2.12 DB ENTITY - COURSE INSTRUCTOR

Day Schedule

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
dschid	DAY SCHEDULE ID	INTEGER	543, 554, 23	✓	✓	PRIMARY	<u>DAY_SCHEDULE</u>	<u>DAY_SCHEDULE</u>
acsmid	ACADEMIC SEMESTER ID	CHAR(3)	A, B	✓		fk01_dsch_acsmid	academic_semester	acsmid
acyrid	ACADEMIC YEAR ID	INT(4)	2011, 2012	✓		fk02_dsch_acyrid	academic_year	acyrid
dgasid	DEGREE ASSOCIATION ID	VARCHAR(5)	IUKB, SUNNY, GREW	✓		fk03_dsch_dgasid	degree_association	dgasid
cmpid	CAMPUS ID	CHAR(1)	A, K, S	✓		fk04_dsch_cmpid	campus	cmpid
clsid	CLASS ID	INT(3)	43, 26	✓		fk05_dsch_clsid	class	clsid
crsid	COURSE ID	INTEGER	434, 41	✓		fk06_dsch_crsid	course	crsid
dglvid	DEGREE LEVEL ID	CHAR(1)	B, M, P	✓		fk07_dsch_dglvid	degree_level	dglvid
instid	INSTRUCTOR ID	INTEGER	43, 554	✓		fk08_dsch_instid	instructor	instid
dgdmid	DEGREE DOMAIN ID	VARCHAR(5)	COMP, IEAWM, PSY	✓		fk09_dsch_dgdmid	degree_domain	dgdmid
dyrid	DEGREE YEAR ID	INT(1)	1, 3, 2	✓		fk10_dsch_dyrid	degree_year	dyrid
tmshid	TIME-SHIFT ID	INT(3)	1, 4, 33	✓		fk11_dsch_tmshid	time_shift	tmshid
wkdid	WEEKDAY ID	VARCHAR(3)	MON, TUE, WED	✓		fk12_dsch_wkdid	week_day	wkdid
cltpid	CLASS TYPE ID	VARCHAR(3)	EXT, SCH, MKP	✓		fk13_dsch_cltpid	class_type	cltpid
date	DATE	DATE	12-02-2012, 01-02-2013	✓				
actid	ACTIVE ID	CHAR(1)	Y, N	✓		fk14_dsch_actid	actions	actid
comment	COMMENT	TEXT	COMMENTS					
time_in	TIME IN	VARCHAR(5)	12:40					
time_out	TIME OUT	VARCHAR(5)	15:50					

Figure 2.13 DB ENTITY - DAY SCHEDULE

Degree Association

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
dgasid	DEGREE ASSOCIATION ID	VARCHAR(5)	GREW, IUKB, SUNNY	✓		PRIMARY	<u>DEGREE_ASSOCIATION</u>	<u>DEGREE_ASSOCIATION</u>
association	UNIVERSITY ASSOCIATION	VARCHAR(30)	GREENWICH, NEW YORK COLLEGE	✓		dgas_atc_unq	<u>DEGREE_ASSOCIATION</u>	<u>DEGREE_ASSOCIATION</u>
active_since	ACTIVE SINCE	DATE	12-05-2002	✓				
active_until	ACTIVE UNTIL	DATE	12-12-2011	✓				
actid	ACTIVE ID	CHAR(1)	Y, N	✓		fk02_dgas_actid	actions	actid

Figure 2.14 DB ENTITY - DEGREE ASSOCIATION

Degree Domain

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
dgdmid	DEGREE DOMAIN ID	VARCHAR(5)	COMP, PSY	✓		PRIMARY	<u>DEGREE_DOMAIN</u>	<u>DEGREE_DOMAIN</u>
domain	STUDY DOMAIN	VARCHAR(50)	COMPUTER SCIENCE, PSYCHOLOGY	✓		dgdms_dm_unq	<u>DEGREE_DOMAIN</u>	<u>DEGREE_DOMAIN</u>
actid	ACTIVE ID	CHAR(1)	Y, N	✓		fk01_dgdm_actid	actions	actid

Figure 2.15 DB ENTITY - DEGREE DOMAIN

Degree Level

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
dglevelid	DEGREE LEVEL ID	CHAR(1)	B, M, P	✓		PRIMARY	DEGREE	DEGREE
level	LEVEL	VARCHAR(30)	BACHELOR, MASTER, PHD	✓		dglevel_uniq	DEGREE	DEGREE

Figure 2.16 DEGREE LEVEL

Degree Title

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
dgtitleid	DEGREE TITLE ID	VARCHAR(8)	IE&WM, COMP, PSY	✓		PRIMARY	DEGREE	DEGREE
title	DEGREE TITLE	VARCHAR(120)	COMPUTER SCIENCE, INTERNET ENGINEERING...	✓		dgtitle_uniq	DEGREE	DEGREE
actid	ACTIVE ID	CHAR(1)	Y, N	✓		fk01_dgtitle_actid	actions	actid

Figure 2.17 DB ENTITY - DEGREE TITLE

Degree Year

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
dgyearid	DEGREE YEAR ID	INT(1)	1, 2, 3	✓		PRIMARY	DEGREE	DEGREE
year	YEAR ID	VARCHAR(10)	FIRST YEAR, SECOND YEAR, THIRD YEAR	✓		dgyear_uniq	DEGREE	DEGREE

Figure 2.18 DB ENTITY - DEGREE YEAR

Instructor

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
instid	INSTRUCTOR ID	INTEGER	56, 55, 2, 105	✓	✓	PRIMARY	INSTRUCTOR	INSTRUCTOR
lname	LAST NAME	VARCHAR(60)	PANDIDAS, HANDS	✓				
fname	FIRST NAME	VARCHAR(50)	IOANNIS, MIKE	✓				
mitroo	MITROO	VARCHAR(10)	546756743	✓				
active_since	ACTIVE SINCE	DATE	12-02-2004, 02-11-2010	✓				
active_until	ACTIVE UNTIL	DATE	12-03-2006, 23-04-2008	✓				
actid	ACTIVE ID	CHAR(1)	Y, N	✓		fk01_inst_actid	actions	actid

Figure 2.19 DB ENTITY - INSTRUCTOR

Master Schedule

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
mschid	MASTER SCHEDULE ID	INTEGER	324, 5566, 5563	✓	✓	PRIMARY	MASTER SCHEDULE	MASTER SCHEDULE
acyrid	ACADEMIC YEAR ID	INT(4)	2012, 2015	✓		fk01_msch_acyrid	academic_year	acyrid
acsmid	ACADEMIC SEMESTER ID	CHAR(1)	A, B	✓		fk03_msch_acsmid	academic_semester	acsmid
dgpsid	DEGREE ASSOCIATION ID	VARCHAR(3)	GREW, ILKB	✓		fk04_msch_dgpsid	degree_association	dgpsid
cmplid	CAMPUS ID	CHAR(1)	A, K, S	✓		fk05_msch_cmplid	campus	cmplid
clsid	CLASS ID	INT(3)	5, 34, 23	✓		fk06_msch_clsid	class	clsid
csid	COURSE ID	INTEGER	64, 776, 446	✓		fk07_msch_csid	course	csid
dglevelid	DEGREE LEVEL ID	CHAR(1)	B, M, P	✓		fk08_msch_dglevelid	degree_level	dglevelid
instid	INSTRUCTOR ID	INTEGER	64, 67, 254	✓		fk09_msch_instid	instructor	instid
dgdmid	DEGREE DOMAIN ID	VARCHAR(5)	IEWM, PSY, COMP	✓		fk10_msch_dgdmid	degree_domain	dgdmid
dgyearid	DEGREE YEAR ID	INT(1)	1, 2, 3	✓		fk11_msch_dgyearid	degree_year	dgyearid
tmshid	TIME SHIFT ID	INT(3)	3, 6, 34	✓		fk12_msch_tmshid	time_shift	tmshid
wkcid	WEEKDAY ID	CHAR(3)	MON, TUE, SUN	✓		fk13_msch_wkcid	weekday	wkcid
actid	ACTIVE ID	CHAR(1)	Y, N	✓		fk14_msch_actid	actions	actid

Figure 2.20 DB ENTITY - MASTER SCHEDULE

Time Shift

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
tmshid	TIME SHIFT ID	INT(3)	3, 34, 23	✓	✓	PRIMARY	TIME SHIFT	TIME SHIFT
shift	TIME SHIFT	VARCHAR(15)	'12:00 - 15:00', '18:00 - 21:00'	✓		tmshif_uniq	TIME SHIFT	TIME SHIFT

Figure 2.21 DB ENTITY - TIME SHIFT

1.4 DATABASE - SCHEDULE ERD

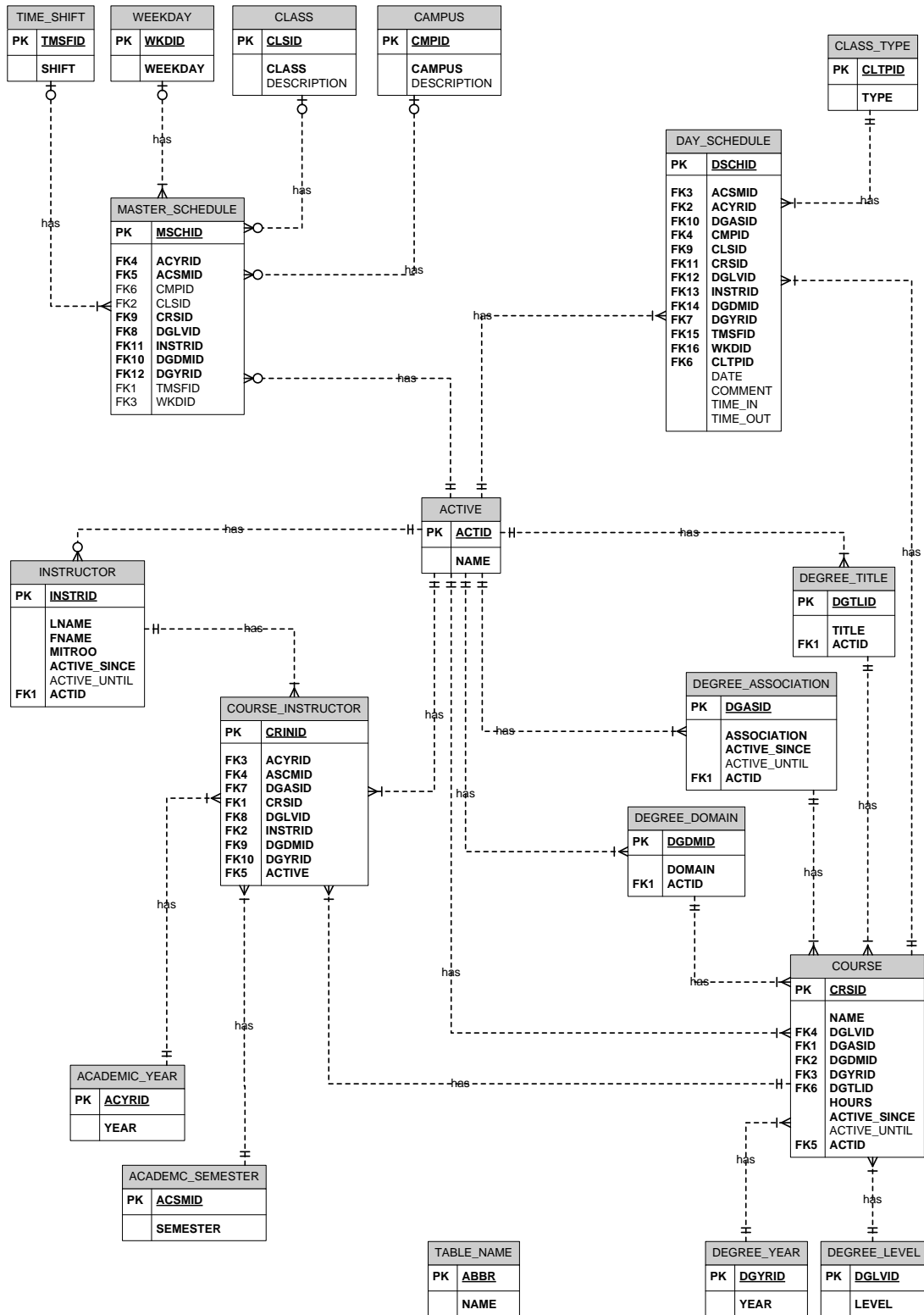


Figure 2.22 DB DESIGN - SCHEDULE ERD

1.5 DATABASE ENTITIES - SYSTEM

Abbreviations

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
abbr.	ABBREVIATION	VARCHAR(30)	'UGID, FNCCATID, INSTRUCTORS	✓		PRIMARY	NULL	NULL
name	ALIAS NAME	VARCHAR(40)	USERGROUP ID, INSTRUCTORS	✓				

Figure 2.23 DB ENTITY - ABBREVIATIONS

Function

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
fnccid	FUNCTION ID	INT(4)	45, 4, 23	✓	✓	PRIMARY	NULL	NULL
func_name	FUNCTION NAME	VARCHAR(40)	MASTER SCHEDULE, COURSES	✓		func_incrnm_unq	NULL	NULL
func_desc	FUNCTION DESCRIPTION	TEXT	'NOTES'					
fnccatid	FUNCTION CATEGORY ID	VARCHAR(5)	FCL, SYS, SCH	✓		fk01_fnccatid	function_category	fnccatid

Figure 2.24 DB ENTITY - FUNCTIONS

Function Category

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
fnccatid	FUNCTION CATEGORY ID	VARCHAR(5)	FCL, SYS, SCH	✓		PRIMARY	NULL	NULL
category	CATEGORY	VARCHAR(20)	FACILITIES, SYSTEM, SCHEDULE	✓		fnccat_cat_unq	NULL	NULL

Figure 2.25 DB ENTITY - FUNCTION CATEGORY

Permission

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
prmid	PERMISSION ID	INT(4)	554, 543, 23	✓	✓	PRIMARY	NULL	NULL
ugid	USERGROUP ID	VARCHAR(5)	ADMIN, FDESK	✓		fk01_prm_ugid	usergroup	ugid
fnccid	FUNCTION ID	INT(4)	54, 445	✓		fk02_prm_fnccid	function	fnccid
prvid	PRIVILEGE ID	CHAR(1)	R, E, A, D	✓		fk03_prm_prvid	privilege	prvid
fnccatid	FUNCTION CATEGORY ID	VARCHAR(5)	SYS, FCL, SCH	✓		fk04_prm_fnccatid	function_category	fnccatid

Figure 2.26 DB ENTITY - PERMISSION

Privilege

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
prvid	PRIVILEGE ID	CHAR(1)	R, E, A, D	✓		PRIMARY	NULL	NULL
privilege	PRIVILEGE NAME	VARCHAR(10)	READ, EDIT, ALL, ADD	✓		prv_priv_unq	NULL	NULL

Figure 2.27 DB ENTITY - PRIVILEGE

Statement

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
stmtid	STATEMENT ID	CHAR(3)	DEL, SEL, UPD	✓		PRIMARY	NULL	NULL
statement	STATEMENT NAME	VARCHAR(10)	DELETE, SELECT, UPDATE	✓		stmt_stmt_unq	NULL	NULL

Figure 2.28 DB ENTITY - STATEMENT

System Activity

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
slolid	SYSTEM LOG ID	INTEGER	544, 325, 6694	✓	✓	PRIMARY		
uid	USER ID	INT(5)	34, 555, 2	✓		FK01_sact_uid	statement	stolid
stolid	STATEMENT ID	VARCHAR(3)	SEL, UPD, DEL	✓				
date	DATE	DATETIME	12-02-2012, 01-03-2011	✓				
time	TIME	VARCHAR(10)	12:40:43, 23:34:04	✓				
command	COMMAND	TEXT	'SELECT * FROM TABLE', 'DELETE FROM ...'	✓				

Figure 2.29 DB ENTITY - SYSTEM ACTIVITY

User

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
uid	USER ID	INT(5)	43, 453, 32	✓	✓	PRIMARY		
username	USERNAME	VARCHAR(50)	'FOK43', ...	✓		usr_uniq		
fname	FIRST NAME	VARCHAR(30)	JIM, MARIA, STELLA	✓				
lname	LAST NAME	VARCHAR(40)	TZIOTAKI, KOUMADAROU, TIRIKOU	✓				
email	EMAIL	VARCHAR(80)	EMAIL@DOMAIN.COM	✓		usr_email_uniq		
phone	PHONE	VARCHAR(15)	432245665	✓		usr_phn_uniq		
ugid	USERGROUP ID	VARCHAR(6)	ADMIN, FDESK	✓		user_RR_T	usergroup	ugid
password	PASSWORD	CHAR(40)	8**9##SEFUS##@	✓		usr_psw_uniq		

Figure 2.30 DB ENTITY - USER

User Activity

COLUMN NAME	SEMANTIC NAME	DATA TYPE	VALID DATA	NOT NULL	AUTO-INCREMENT	CONSTRAINT NAME	REFERENCED TABLE NAME	REFERENCED COLUMN NAME
ulolid	USER LOG ID	INTEGER	5543, 554, 334	✓	✓	PRIMARY		
uid	USER ID	INT(5)	543, 54, 33	✓		R01_usoc_usr	user	uid
stolid	STATEMENT ID	VARCHAR()	SEL, DEL, INS	✓		R02_usoc_stolid	statement	stolid
date	DATE	DATETIME	23-03-2003, 03-03-2011	✓				
time	TIME	VARCHAR(10)	12:30:34, 11:43:43	✓				
command	COMMAND	TEXT	'INSERT INTO TABLE VALUES (...)'	✓				

Figure 2.31 DB ENTITY - USER ACTIVITY

1.6 DATABASE - SYSTEM ERD

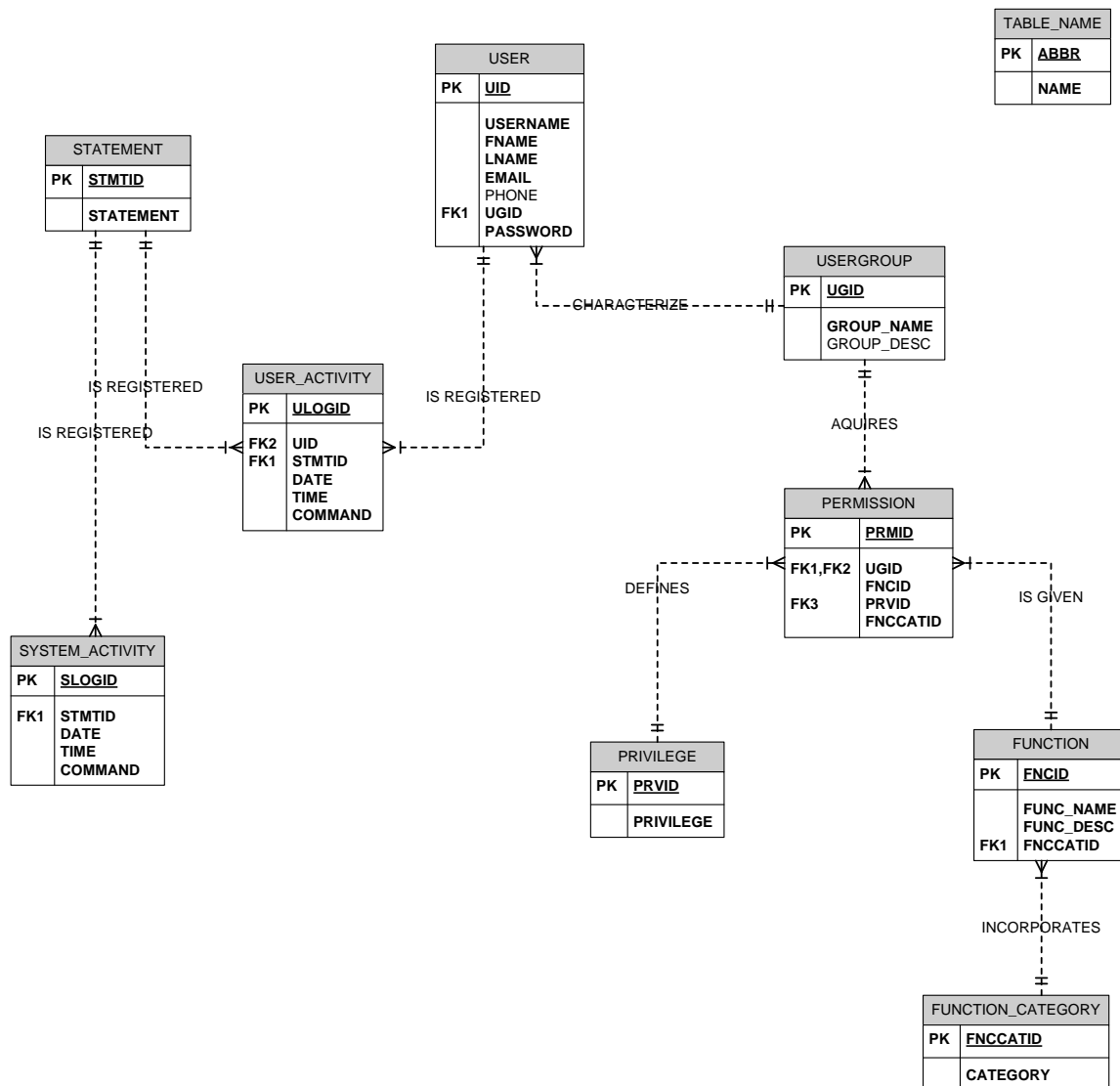


Figure 2.32 DB DESIGN - BACK-END SYSTEM ERD