

CASE TOOLS

Assignment 8

Submitted by

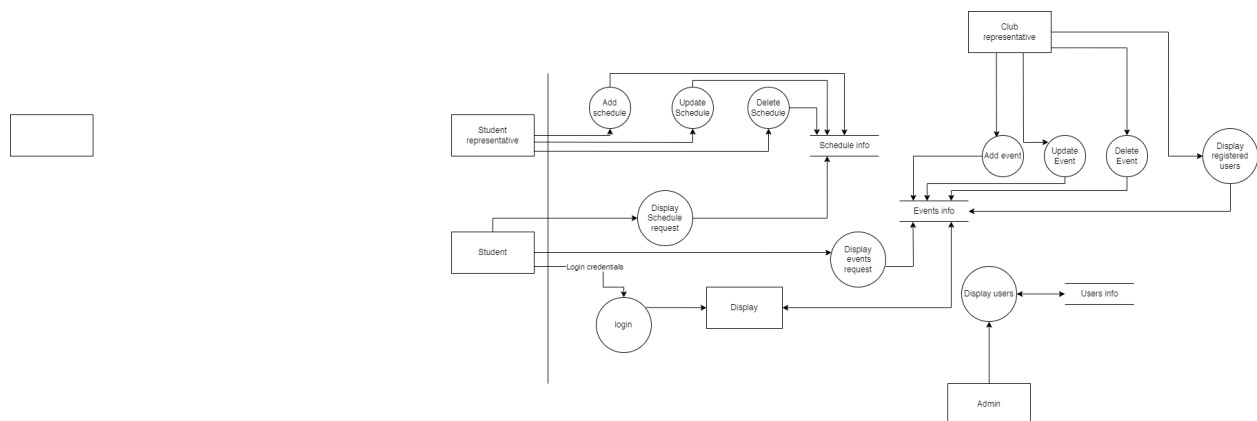
Arunakiran Mahadevamangalam - 207110

Pranava Vedagnya Gaddam - 207125

Lakshya Jalan - 207138

Divya Soni - 207124

Level 1 DFD with the boundaries:



Identifying Complexity - transaction functions

Transaction Functions	Fields/File involvement	DET _s	FTR
Display Events (EQ)	Fields: Date, Club, Branch File: Event Info	3	1
Display Schedule (EQ)	Fields: Date, Branch, Year, Subject File: Academics Info	4	1

Login (EI)	Fields: Email, Password File: Users DB	2	1
Register (EI)	Fields: Email, Name, Password, Branch, Year, Clubs part of Files: Users DB, Clubs DB	6	2
Display Users (EQ)	Fields: None Files: Users DB	0	1
Add Club (EI)	Fields: Club Name, Email, Password, Students Open To Files: Clubs DB	4	1
Remove Club (EI)	Fields: Club Name Files: Clubs DB	1	1
Edit User Roles (EI)	Fields: User Email, User Role Files: Users DB, Clubs DB	2	2
Add Event (EI)	Fields: event name, date, time, club name, branch, year Files: Events info	6	1
Update Event (EI)	Fields: event name, date, time, club name, branch, year Files: Events info	6	1
Delete Event (EI)	Fields: event name, date, time, club name, branch, year Files: Events info	6	1
Add Exam/Schedule (EI)	Fields: Date, Time, Branch, Course, Year Files: Acads info	5	1
Update Exam/Schedule (EI)	Fields: Date, Time, Branch, Course, Year Files: Acads info	5	1

Delete Exam/Schedule (EI)	Fields: Date, Time, Branch, Course, Year Files: Acads info	5	1
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Identifying Complexity - data functions

Data Functions	Fields/File involvement	RET _s	DET _s
User DB (ILF)	Fields: Email, Name, Password, Branch, Year, Clubs part of	1	6
Clubs DB (ILF)	Fields: Club Name, Email, Password, Students Open To	1	4
Academics DB (ILF)	Fields: Exam Name, Date, Time, Branch, Course, Year	1	6
Events DB (ILF)	Fields: event name, date, time, club name, branch, year	1	6

Unadjusted Function Point Contribution - Data functions

Data Functions	RET _s	DET _s	Complexity	UFP
User DB	1	6	low	5
Clubs DB	1	4	low	5
Academics DB	1	6	low	5
Events DB	1	6	low	5

Total				20
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Unadjusted Function Point Contribution - Transaction functions

Transaction Functions	DET _s	FTR _s	Complexity	UFP
Display Event	3	1	low	3
Display Schedule	4	1	low	3
Display Users	0	1	low	3
Add Club	4	1	low	3
Remove Club	1	1	low	3
Edit User Roles	2	2	average	4
Register	6	2	average	4
Login	1	2	average	4
Add Event	6	1	low	3
Update Event	6	1	low	3
Delete Event	6	1	low	3
Add Exam	5	1	low	3
Update Exam	5	1	low	3
Delete Exam	5	1	low	3
Total				45

General System Characteristics

S.No	GSC	DI
1.	Data Communications	1
2.	Distributed Data Processing	1
3.	Performance	2
4.	Heavily Used Configuration	3
5.	Transaction Rate	2
6.	Online Data Entry	4
7.	End-User Efficiency	3
8.	Online Update	4
9.	Complex Processing	2
10.	Reusability	2
11.	Installation Ease	1
12.	Operational Ease	1
13.	Multiple Sites	1
14.	Facilitate Sites	1
Total Degree of Influence(TDI)		28

$$VAF = (0.65 + (0.01 * TDI)) = 0.93$$

Calculations

$$UFP = UFP(Data Fn) + UFP(Transaction Fn) = 20 + 45 = 65$$

$$Adjusted\ Function\ Point\ Count = UFP * VAF = 65 * 0.93 = 60.45$$

Effort for Java = AFP * Productivity = 60.45 * 10.6 = 80 person days