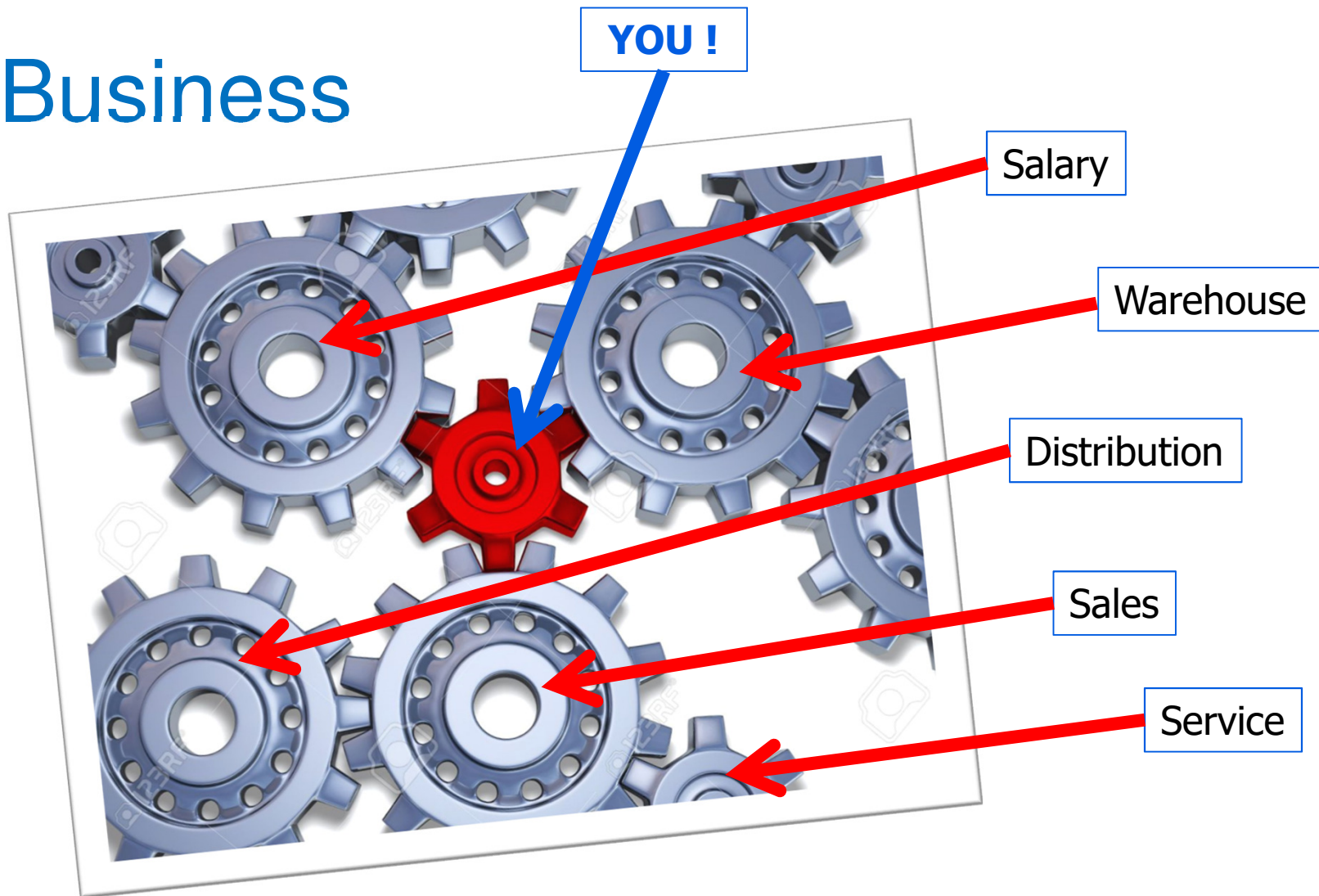


Tracking Data

... Data

MIS – Database I - ERD

Business



MIS – Database II – MS Access

Relationships Among Records

-- Values in one table relating to rows in other tables

Email Table

EmailNum	Date	Message	Student Number
1	2/1/2004	For homework 1, do you want us to provide notes on our references?	1325
2	3/15/2004	My group consists of Swee Lau and Stuart Nelson.	1325
3	3/15/2004	Could you please assign me to a group?	1644

Student Table

Student Number	Student Name	HW1	HW2	MidTerm
1325	BAKER, ANDREA	88	100	78
1644	LAU, SWEE	75	90	90
2881	NELSON, STUART	100	90	98
3007	FISCHER, MAYAN	95	100	74
3559	TAM, JEFFREY		100	88
4867	VERBERRA, ADAM	70	90	92
5265	VALDEZ, MARIE	80	90	85
8009	ROGERS, SHELLY	95	100	98

Office_Visit Table

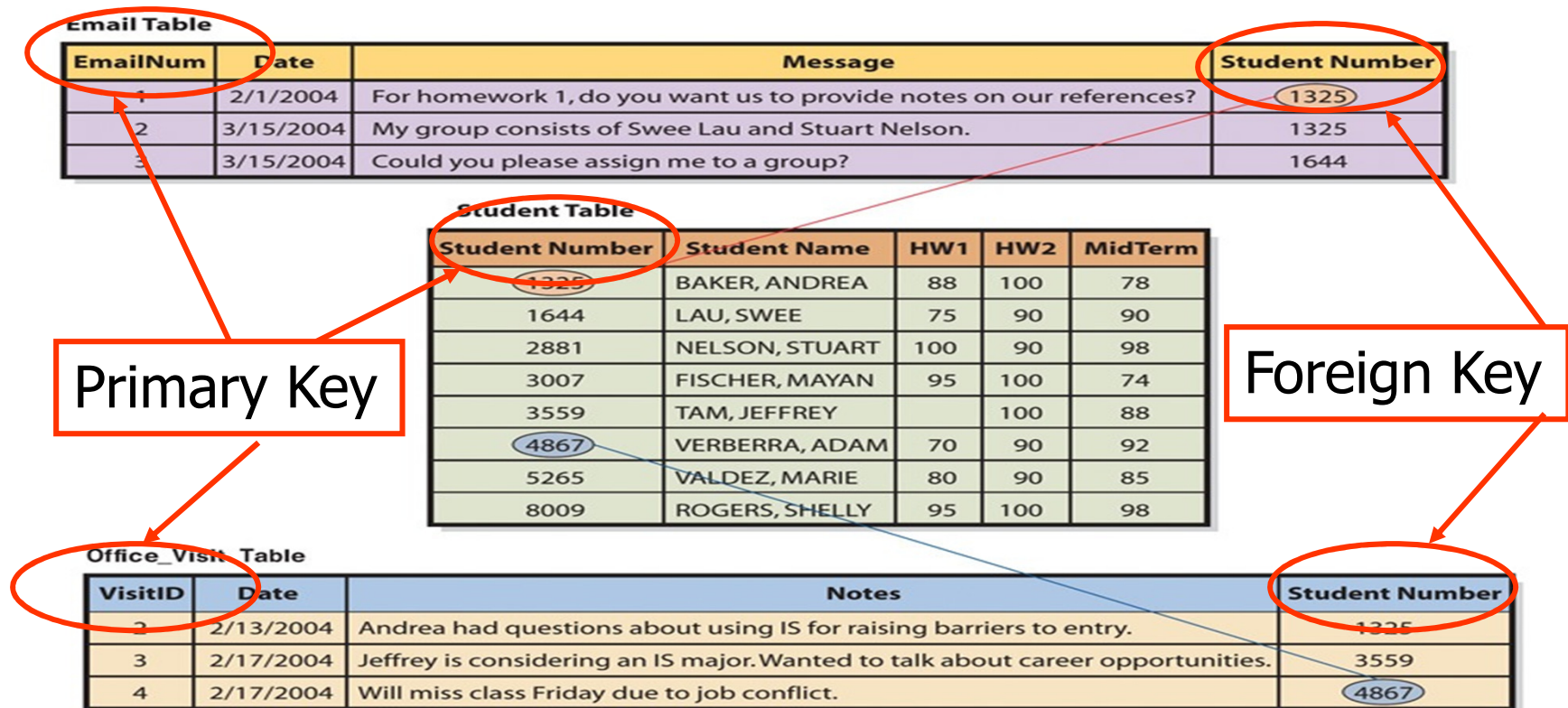
VisitID	Date	Notes	Student Number
2	2/13/2004	Andrea had questions about using IS for raising barriers to entry.	1325
3	2/17/2004	Jeffrey is considering an IS major. Wanted to talk about career opportunities.	3559
4	2/17/2004	Will miss class Friday due to job conflict.	4867

Relationships Among Records

- **Primary Keys**
 - Column(s) that identify unique row in table
 - Each table has a key
- **Foreign keys**
 - Primary Keys from a different table
- **Relational database**
 - Databases using tables, primary keys & foreign keys

MIS – Database II – MS Access

Relationships Among Records



Metadata

- Databases are self-describing
 - Contain description of its content
- Metadata
 - Data that describes data
 - Makes databases more useful
 - Makes databases easier to use

MIS – Database II – MS Access

MS Access – 2016 (Terminology)

The screenshot displays the Microsoft Access 2016 interface. The top ribbon shows the 'Table Tools' tab with various options like 'Filter', 'Sort & Filter', 'Records', 'Find', 'Window', and 'Text Formatting'. The left-hand navigation pane shows a list of tables and queries, with 'takes' highlighted. The central area displays the 'STUDENT' table in Datasheet View. The table has five columns: 'StudentNo', 'Lastname', 'Firstname', 'Phone', and 'DOB'. The data is organized into rows, with the first row being the header row. Hand-drawn yellow callouts identify key components: 'Ribbon' points to the top menu bar; 'Tables' points to the 'Tables' section in the left pane; 'Field(s)' points to the column headers of the 'STUDENT' table; 'Record' points to a single row of data; and 'Individual Table' points to the entire 'STUDENT' table grid.

StudentNo	Lastname	Firstname	Phone	DOB
0004785	Twishisher	Bess	(226) 555-8412	5/7/1999
0056348	Skluue	Elmer	(416) 555-1745	1/12/1986
0135955	Pease	Warren	(519) 555-2225	4/23/1996
0200045	Sess	Simon	(519) 555-0334	7/6/1955
0236744	StudentLast	StudentFirst	(416) 555-8978	5/5/1992
0340014	Brainful	Isma	(226) 555-7018	11/30/1997
0789234	Highwater	Helen	(905) 555-1741	6/18/1998
0789293	Evore	Herb	(519) 555-1315	12/24/1987
1000345	Atrick	Jerry	(519) 555-7255	10/11/1988
1003469	Ferterbest	Hope	(514) 555-3495	4/21/1977
1118934	Dupp	Stan	(613) 555-4307	5/17/1999
1240597	Shunnary	Dick	(514) 555-6492	8/28/1999
1278936	DeLyone	Dan	(226) 555-1835	4/12/1993
1458973	Tress	Matt	(519) 555-6872	5/7/1999
1984503	Hahand	Linda	(519) 555-0964	6/18/1998
2258743	Kashun	Ava	(819) 555-9949	4/21/1977
2378422	Gedon	Alma	(226) 555-7410	5/7/1999
2896372	Toast	Bert	(519) 555-6888	4/23/1996

MIS – Database II – MS Access

MS Access – 2016 (Navigation Buttons)

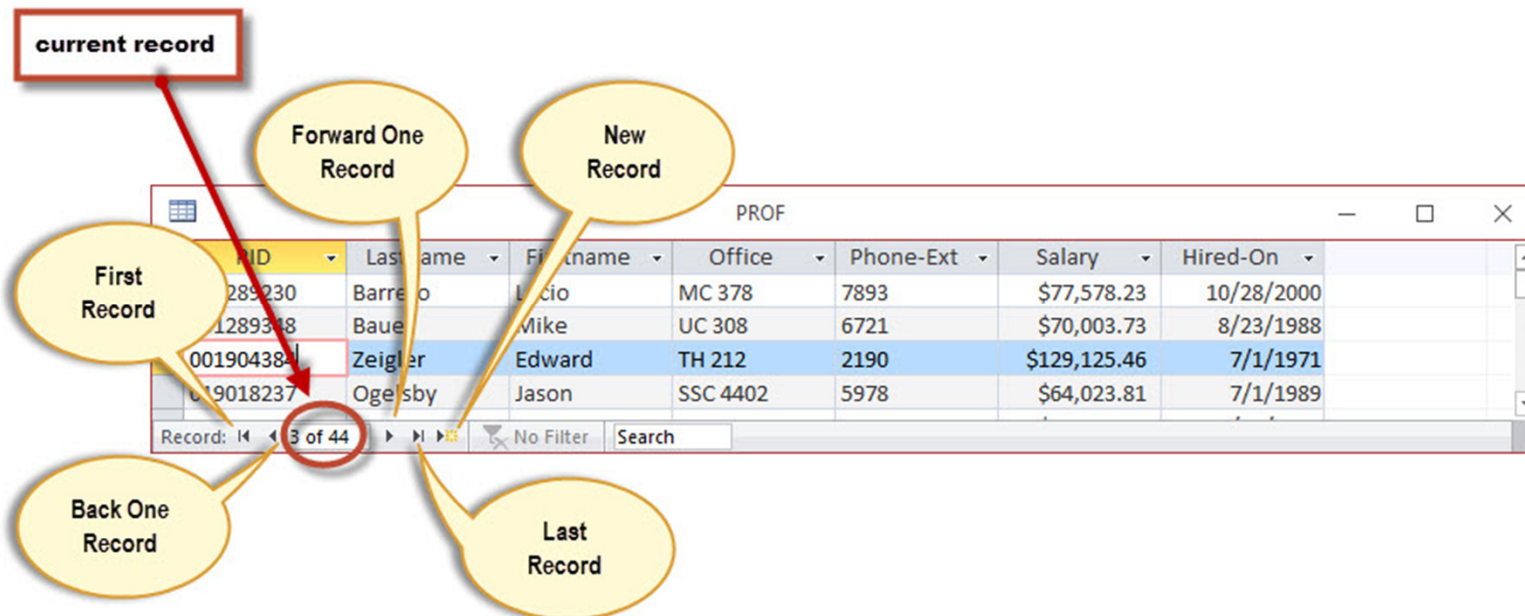


Table Views

- Datasheet view
 - Add records
 - Edit records
 - Delete records
- Design view
 - Create fields
 - Modify fields

MIS – Database II – MS Access

MS Access – 2016 (Terminology)

TABLE VIEW
(tabbed datasheet)

University - Safe : Database- C:\Examples\University - Safe.accdb (Access 2007 - 2016 file format) - Access

Table Tools: Fields, Table

Home: View, Paste, Copy, Cut, Format Painter, Filter, Sort & Filter, Selection, Advanced, Refresh All, Save, Delete, More, Find, Replace, Go To, Select, Text Formatting

Tables: COURSE, DEPARTMENT, PROF, PROFESSOR, STUDENT, takes, TAKES_FILLED, TEACHES, QueryA, QueryB, QueryC, QueryD, QueryE

StudentNo	Lastname	Firstname	Phone	DOB
0000131	Fannomega	Alf	(519) 555-2118	3/4/1993
0004785	Twishishes	Bess	(226) 555-8412	5/7/1999
0056348	Sklue	Elmer	(416) 555-1745	1/12/1986
0135955	Pease	Warren	(519) 555-2225	4/23/1996
0200045	Sess	Simon	(519) 555-0334	7/6/1955
0236744	StudentLast	StudentFirst	(416) 555-8978	5/5/1992
0340014	Brainful	Isma	(226) 555-7018	11/30/1997
0789234	Highwater	Helen	(905) 555-1741	6/18/1998
0789293	Evore	Herb	(519) 555-1315	12/24/1987
1000345	Atrick	Jerry	(519) 555-7255	10/11/1988
1003469	Ferterbest	Hope	(514) 555-3495	4/21/1977
1118934	Dupp	Stan	(613) 555-4307	5/17/1999
1240597	Shunnary	Dick	(514) 555-6492	8/28/1999
1278936	DeLyone	Dan	(226) 555-1835	4/12/1993
1458973	Tress	Matt	(519) 555-6872	5/7/1999
1984503	Hahand	Linda	(519) 555-0964	6/18/1998
2258743	Kashun	Ava	(819) 555-9949	4/21/1977
2378422	Gedon	Alma	(226) 555-7410	5/7/1999
2896372	Toast	Bert	(519) 555-6888	4/23/1996
2986574	Duktul	Terry	(519) 555-3101	10/10/1997
3023495	Less	Ruth	(519) 555-0426	4/21/1977
3218949	Eazely	Bruce	(226) 555-7773	5/7/1999
3241178	Odious	Mel	(519) 555-1093	6/18/1998
3336660	Slift	Fav	(613) 555-4582	4/23/1996

Record: 1 of 31 of 33 No Filter Search

MIS – Database II – MS Access

MS Access – 2016 (Terminology)

TABLE VIEW
(floating datasheet)

The screenshot displays the Microsoft Access 2016 interface. The ribbon is set to 'Table Tools' with the 'Table' tab selected. The ribbon includes sections for 'Filter', 'Sort & Filter', 'Records', 'Find', 'Window', and 'Text Formatting'. The left-hand pane shows the 'All Access Objects' list, with 'Tables' expanded and 'takes' selected. The main area shows a floating window titled 'STUDENT' containing a datasheet view of the table. The datasheet has columns for 'StudentNo', 'Lastname', 'Firstname', 'Phone', and 'DOB'. The status bar at the bottom indicates 'Record: 14 of 32 of 33' and 'No Filter'.

StudentNo	Lastname	Firstname	Phone	DOB
0004785	Twishishes	Bess	(226) 555-8412	5/7/1999
0056348	Skhue	Elmer	(416) 555-1745	1/12/1986
0135955	Pease	Warren	(519) 555-2225	4/23/1996
0200045	Sess	Simon	(519) 555-0334	7/6/1955
0236744	StudentLast	StudentFirst	(416) 555-8978	5/5/1992
0340014	Brainful	Isma	(226) 555-7018	11/30/1997
0789234	Highwater	Helen	(905) 555-1741	6/18/1998
0789293	Evore	Herb	(519) 555-1315	12/24/1987
1000345	Atrick	Jerry	(519) 555-7255	10/11/1988
1003469	Ferterbest	Hope	(514) 555-3495	4/21/1977
1118934	Dupp	Stan	(613) 555-4307	5/17/1999
1240597	Shunnary	Dick	(514) 555-6492	8/28/1999
1278936	DeLyone	Dan	(226) 555-1835	4/12/1993
1458973	Tress	Matt	(519) 555-6872	5/7/1999
1984503	Hahand	Linda	(519) 555-0964	6/18/1998
2258743	Kashun	Ava	(819) 555-9949	4/21/1977
2378422	Gedon	Alma	(226) 555-7410	5/7/1999
2896372	Toast	Bert	(519) 555-6888	4/23/1996

MIS – Database II – MS Access

MS Access – 2016 (Terminology)

TABLE VIEW (design view)

