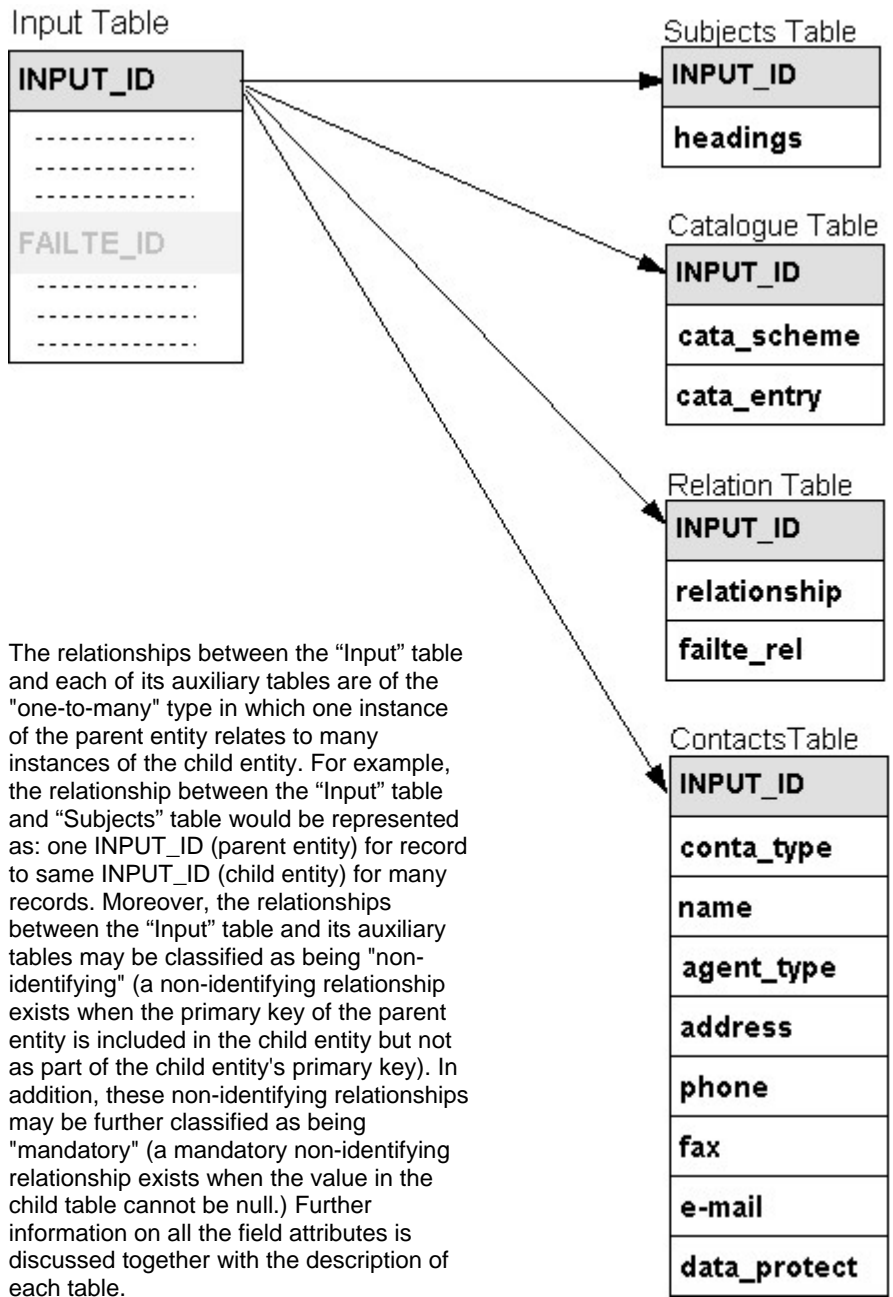


FAILTE RDBMS Scheme

(INPUT Database: Tables structure & Fields description)

| | |
|---------------------|--|
| Author | Santiago Chumbe |
| Related Task | 2.4, 3.1, 3.2, 3.3 and 3.4 |
| Date | 19 - December - 2000 |
| Version | 1.0 |
| Summary | <p>This document presents the scheme of the five tables included in the INPUT Database. The idea behind of this DB scheme is minimisation (minimisation of data redundancy, of data restructuring, of memory and of I/O.)</p> <p>We have tried to make use of the benefits that the relational database model offers, such as:</p> <ul style="list-style-type: none">• Reliable data entry, updates and deletions performance.• Efficient data retrieval• Clean relationships among tables.• The field names are used to track valuable information such as the data type and field size, which makes the database somewhat self-documented.• Changes to the database schema will be possible to make. <p>This document is part of the FAILTE RDBMS Scheme Report, which is under development.</p> <hr/> <p><i>The central theme behind database design is to "measure twice, cut once"</i> Anonymous</p> <p><i>Computers are useless. They can only give you answers</i> Pablo Picasso (1881-1973)</p> <p><i>Honest disagreement is often a good sign of progress</i> Mahatma Gandhi (1869-1948)</p> |

FAILTE RDBMS → Tables in the “INPUT” Database



The relationships between the “Input” table and each of its auxiliary tables are of the “one-to-many” type in which one instance of the parent entity relates to many instances of the child entity. For example, the relationship between the “Input” table and “Subjects” table would be represented as: one INPUT_ID (parent entity) for record to same INPUT_ID (child entity) for many records. Moreover, the relationships between the “Input” table and its auxiliary tables may be classified as being “non-identifying” (a non-identifying relationship exists when the primary key of the parent entity is included in the child entity but not as part of the child entity’s primary key). In addition, these non-identifying relationships may be further classified as being “mandatory” (a mandatory non-identifying relationship exists when the value in the child table cannot be null.) Further information on all the field attributes is discussed together with the description of each table.

FAILTE RDBMS → “INPUT” Database → “input” Table Structure

| N. | FIELD NAME | G.E. | TYPE | DEFAULT | ATTRIBUTE | CONTENTS | F |
|----|-------------------|------|--------------|-----------------|-------------|-------------------------------------|---|
| 1 | input_idx0 | - | Small Int | Autogenerated | Primary Key | Unsigned, Unique value | A |
| 2 | titlex1 | 3.2 | Text | VOID | NOT NULL | Any text | M |
| 3 | alter_titlex4 | 3.3 | Text | - | NULL | Comma separated text | O |
| 4 | URLx1 | 3.5 | Varchar(250) | VOID | NOT NULL | valid URL | M |
| 5 | second_URLx4 | 3.6 | Text | - | NULL | Comma separated text | O |
| 6 | edu_descripx2 | 5.2 | Text | unspecified | NOT NULL | Any text | R |
| 7 | gen_descripx2 | 3.7 | Text | unspecified | NOT NULL | Any text | R |
| 8 | rights_costx2 | 3.8 | Enum | Unknown | NOT NULL | (see Sets&Enums) | R |
| 9 | rights_condx4 | 3.9 | Varchar(250) | - | NULL | Any text | O |
| 10 | a07wardsx2 | 3.10 | Set | None specified | NOT NULL | (see Sets&Enums) | R |
| 11 | l05anguagex2 | 3.11 | Set | eng | NOT NULL | <i>eng, fre, ger, jpn, spa, ...</i> | R |
| 12 | referencex4 | 3.12 | Varchar(250) | - | NULL | Any text | O |
| 13 | versionx2 | 3.13 | Varchar(20) | Unspecified | NOT NUL | Any text | R |
| 14 | date_publishx4 | 3.14 | Date | - | NULL | Date | O |
| 15 | date_modifyx4 | 3.15 | Date | - | NULL | Date | O |
| 16 | m06ediumx2 | 3.16 | Set | Web-based | NOT NULL | (see Sets&Enums) | R |
| 17 | requirementx2 | 3.17 | Text | Unknown | NOT NULL | Any text | R |
| 18 | countryx2 | 3.19 | Enum | Unknown | NOT NULL | <i>GB, US, FR, DE, ...</i> | R |
| 19 | e06duca_levelx2 | 5.3 | Set | Unknown | NOT NULL | (see Sets&Enums) | R |
| 20 | r15esource_typex2 | 5.1 | Set | Courseware/T.M. | NOT NULL | (see Sets&Enums) | R |
| 21 | durationx4 | 5.4 | Enum | - | NULL | <i>S, M, L, XL</i> | O |
| 22 | interactivityx2 | 5.5 | Enum | Unknown | NOT NULL | (see Sets&Enums) | R |
| 23 | e03nd_userx4 | 5.6 | Set | - | NULL | <i>Tutor, Author, Student</i> | O |
| 24 | supportx4 | 5.7 | Varchar(38) | - | NULL | Any text | O |
| 25 | d03eliveryx2 | 5.8 | Set | Unknown | NOT NULL | (see Sets&Enums) | R |
| 26 | a04ugmentx4 | 5.9 | Set | - | NULL | (see Sets&Enums) | O |
| 27 | rec_creatorx0 | 6.1 | Set | Autogenerated | NOT NULL | JS, PB, FL (restricted) | A |
| 28 | rec_validatorx2 | 6.2 | Enum | Invalidated | NOT NULL | <i>PB, Invalidated</i> | R |
| 29 | date_enterx0 | 6.3 | Date | Autogenerated | NOT NULL | Date, access restricted | A |
| 30 | to_be_reviewedx2 | 6.4 | Date | Autogenerated | NOT NULL | Date | R |
| 31 | last_reviewedx2 | 6.5 | Date | Autogenerated | NOT NULL | Date | R |
| 32 | last_modifiedx0 | 6.6 | Date | Autogenerated | NOT NULL | Date, access restricted | A |
| 33 | lang_metadax2 | 6.7 | Enum | eng | NOT NULL | <i>eng, fre, ger, jpn, spa, ...</i> | R |
| 34 | commentx4 | 6.9 | Text | - | NULL | Any text | O |
| 35 | statusx1 | 6.8 | Enum | Admitted | NOT NULL | (see Sets&Enums) | M |
| 36 | failte_idx0 | 3.1 | Small Int | Autogenerated | NULL | Valid FAILTE_ID | A |

G.E. = Entry Number in the Alpha Guidelines for FAILTE metadata by Jenny Slater 1/11/00

F = Record's FILLING can be M: Mandatory, R: Required, C: Conditional, O: Optional or A: Automatic

T.M.= Training material

“subjects” Table (3.4)

| FIELD NAME | TYPE | DEFAULT | ATTRIBUTE | CONTENTS | FILLING |
|-------------|-----------|---------------|-------------|------------------------|---------|
| record_idx0 | Small Int | Autogenerated | Primary Key | Unsigned, Unique value | A |
| input_idx0 | Small Int | 0 | NOT NULL | From the Input table | A |
| headingsx2 | Char(90) | unspecified | NOT NULL | EEVL entry name | R |
| codex2 | Char(6) | - | NOT NULL | EEVL entry name | R |

“catalogue” Table (3.20)

| FIELD NAME | TYPE | DEFAULT | ATTRIBUTE | CONTENTS | FILLING |
|---------------|-----------|---------------|-------------|------------------------|---------|
| record_idx0 | Small Int | Autogenerated | Primary Key | Unsigned, Unique value | A |
| input_idx0 | Small Int | 0 | NOT NULL | From the Input table | A |
| cata_schemex4 | Enum | - | NULL | EEVL,EASEIT,ISBN | O |
| cata_entryx3 | Char(50) | unspecified | NOT NULL | Alphanumeric | C |

“relations” Table (3.18)

| FIELD NAME | TYPE | DEFAULT | ATTRIBUTE | CONTENTS | FILL |
|----------------|-----------|---------------|-------------|------------------------|------|
| record_idx0 | Small Int | Autogenerated | Primary Key | Unsigned, Unique value | A |
| input_idx0 | Small Int | 0 | NOT NULL | From the Input table | A |
| relationshipx4 | Enum | - | NULL | (see Sets&Enums) | O |
| failte_relx3 | Small Int | 0 | Foreign Key | Related FAILTE_ID | C |

“contacts” Table (4.1 to 4.4)

| FIELD NAME | TYPE | DEFAULT | ATTRIBUTE | CONTENTS | FILL |
|---------------|-----------|---------------|-------------|------------------------|------|
| record_idx0 | Small Int | Autogenerated | Primary Key | Unsigned, Unique value | A |
| input_idx0 | Small Int | 0 | NOT NULL | From the Input table | A |
| conta_typex2 | Enum | unspecified | NULL | (see Sets&Enums) | R |
| namex3 | Char(250) | - | NULL | Any text | C |
| agent_typex4 | Enum | - | NULL | (see Sets&Enums) | O |
| streetx4 | Char(40) | - | NULL | Any text | O |
| cityx4 | Char(40) | - | NULL | Any text | O |
| countryx4 | Char(40) | - | NULL | Any text | O |
| ZIPx4 | Char(40) | - | NULL | Any text | O |
| phonex4 | Char(40) | - | NULL | Valid phone number | O |
| faxx4 | Char(40) | - | NULL | Valid Fax number | O |
| emailx4 | Char(50) | - | NULL | Valid E-mail address | O |
| data_protecx3 | Enum | OK | NOT NULL | OK, Not OK | C |

Notes

- At the moment, the scheme only considers EEVL subject headings. In case a new Subject Headings Classification is adopted, a new pair of columns will be added to the “subjects” table.

Sets&Enums

AWARDS

- Easeit-Eng
- Bobby
- EEVL Choice
- UCISA
- EASA
- Scout Report Selection
- None specified

EDUCA_LEVEL

- Foundation
- Introductory
- Intermediate
- Advanced
- General
- Unknown

MEDIUM

- Web-based
- Diskette
- CD_ROM
- Print
- VHS
- DVD

INTERACTIVITY

- Highly interactive
- interactive
- Expositive
- Unknown

DELIVERY

- Distance Learning
- Classroom
- Unknown

AUGMENT

- Lecture
- Tutorial
- Seminar
- Lab

RIGHTS COST

- Unknown
- Free
- < £ 20
- £20 - £ 50
- £ 51 - £ 100
- £ 101 - £ 500
- > £ 500

CONTA_TYPE

- Creator
- Contributor
- Publisher
- Distributor
- Rights Holder
- Unspecified

AGENT_TYPE

- Individual
- Group
- Commercial Org.
- Educational Inst.
- Unspecified

RESOURCE_TYPE

- Exercise
- Simulation
- Questionnaire
- Diagram
- Figure
- Graph
- Index
- Slide
- Table
- Narrative Text
- Exam
- Experiment
- ProblemStatement
- Courseware/ Training material
- Self/Assessment

RELATIONSHIP

- Is Part Of
- Has Part
- Is Replaced By
- Replaces
- Is R By
- Requires
- Is Version Of
- Has Version
- Is Referenced By
- References
- Is Format Of
- Has Format

STATUS

- Suggested
- Admitted
- Pending
- Reviewed
- Valid
- Included
- Incomplete
- Discarded
- Aged

Notes:

- A field with the value VOID or 0 means that it must to be filled by the cataloguer. A record will be created only if the cataloguer enters a valid data in these fields.
- The STATUS field of a new entry will be automatically filled with the value "Admitted" if all its mandatory fields have been filled by the cataloguer.
- The FAILTE_ID will be filled when the record is included in the "MAIN" database.
- Periodically the "MAIN" database will be updated by including new records from the "INPUT" database.
- "FILLING" of the fields can be:
 - **M**: Mandatory. The field must contain a valid value. Otherwise the record will not be created in any database at all.
 - **R**: A valid value is required. Otherwise the record will became "*incomplete*" (see Report: "FAILTE System Design").
 - **C**: If a related field is filled then the filling of this field becomes mandatory.
 - **O**: Optional. The field may contain a value or not.
 - **A**: Automatic. The field is filled automatically by the ADMIT program (see Report: "FAILTE System Design").

FAILTE RDBMS → “INPUT” Database → Fields Description and Purpose

| No. | FIELD NAME | DESCRIPTION | TO BE USED FOR |
|-----|-------------------|--|----------------------|
| 1 | record_idx0 | Unique ID of a record in any table | Admin |
| 2 | input_idx0 | Unique ID of the resource in the INPUT database | Admin |
| 3 | titlex1 | Resource title | Search, Display |
| 4 | alter_titlex4 | Alternative titles | Search, Display |
| 5 | URLx1 | Main URL (resource location) | Search, Display |
| 6 | second_URLx4 | Secondary URLs | Search, Display |
| 7 | edu_descripx2 | Educational Description | Search, Display |
| 8 | gen_descripx2 | General Description | Search, Display |
| 9 | rights_costx2 | Rights: Cost of the resource | Browse, Display |
| 10 | rights_condx4 | Rights: Conditions of use | Filters, Display |
| 11 | a07wardsx2 | Awards | Display |
| 12 | l05anquagex2 | Language used in the resource | Filters, Display |
| 13 | referencex4 | Reference to further information on the resource | Display |
| 14 | versionx2 | Resource version | Display |
| 15 | date_publishx4 | Date of publication | Display |
| 16 | date_modifyx4 | Last modified date of the resource | Display |
| 17 | m06ediumx2 | The medium of the resource | Display |
| 18 | requirementx2 | Technical Requirements | Filters, Display |
| 19 | countrvx2 | Country of origin | Display |
| 20 | e06duca_levelx2 | Educational level | Display |
| 21 | r15esource_typex2 | Resource type (mode of using the resource) | Filters, Display |
| 22 | durationx4 | Time covered by the resource | Filters, Display |
| 23 | interactivityx2 | Interactivity type/level | Filters, Display |
| 24 | e03nd_userx4 | Intended end user role | Filters, Display |
| 25 | supportx4 | Tutor support documentation | Filters, Display |
| 26 | d03eliverx2 | Delivery environment | Display |
| 27 | a04uqmentx4 | Replace/Augment | Display |
| 28 | rec_creatorx0 | Record contributors | Display |
| 29 | rec_validatorx2 | Record validator | Admin |
| 30 | date_enterx0 | Date record entered | Admin |
| 31 | to_be_reviewedx2 | Date to be reviewed | Admin |
| 32 | last_reviewedx2 | Date last reviewed | Admin |
| 33 | last_modifiedx0 | Date last modified | Admin, Display |
| 34 | lang_metadax2 | Language of the metadata | Admin |
| 35 | commentx4 | Comments made by the cataloguer | Admin |
| 36 | statusx1 | Decision on the record status | Admin |
| 37 | failte_idx0 | Unique ID of the resource in the FAILTE database | Admin |
| 38 | callsx0 | Times a record has been retrieved | Rank, Admin, Display |
| 39 | visitsx0 | Times a resource URL has been visited | Rank, Admin, Display |
| 40 | cata_schemex4 | Catalogue Scheme (EEVL, EASEIT, ISBN) | Admin, Display |
| 41 | cata_entryx3 | Catalogue Entry | Admin, Display |
| 42 | relationshipx4 | Relationship between two or more FAILTE records | Display |
| 43 | failte_relx3 | FAILTE ID used as a relationship key | Admin |
| 44 | conta_typex2 | Role of the contact in the resource | Admin |
| 45 | namex3 | Contact full name | Admin |
| 46 | agent_typex4 | Agent type of the contact | Admin |
| 47 | streetx4 | Address street of the contact | Admin |
| 48 | cityx4 | Address city | Admin |
| 49 | countryx4 | Address country | Admin |
| 50 | ZIPx4 | ZIP Code | Admin |
| 51 | phonex4 | Contact full telephone number | Admin |
| 52 | faxx4 | Contact full fax number | Admin |
| 53 | emailx4 | Contact full e-mail address | Admin |
| 54 | data_protecx3 | Data protection | Admin |
| 55 | headingsx2 | (EEVL) Subject heading description | Display |
| 56 | codex2 | (EEVL) Subject heading code | Filter, Search |