|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DATABASE** | DatabaseDB | | | **SCHEMA** | | public | | **TABLE** | History | |
| **SEQUENCE** | Statement\_id\_seq | | | | | | **COMMENT** | 對帳 | | |
| **COLUMN** | | | **TYPE** | | **NULLABLE** | **DEFAULT** | **INDEX** | **REFERENCES** | | **COMMENT** |
| id | | | serial8 | |  |  | PRIMARY KEY |  | | 主鍵(64位元) |
| activity | | | int4 | |  |  |  | Activity | | 外鍵:活動 |
| someone | | | int4 | | NOT NULL |  |  | Someone | | 外鍵:會員 |
| amount | | | int4 | |  |  |  |  | | 金額 |
| score | | | int2 | | NOT NULL | 0 |  |  | | 點數異動 |
| financialInstitution | | | int2 | |  |  |  | FinancialInstitution | | 外鍵:金融機構 |
| financialAccountHolder | | | varchar | |  |  |  |  | | 金融帳戶戶名 |
| financialAccountNumber | | | varchar | |  |  |  |  | | 金融帳戶號碼 |
| occurred | | | timestamp | | NOT NULL | now() |  |  | | 發生時戳 |
| agent | | | int4 | |  |  |  | Someone | | 外鍵:匯款人 |
| **Unique Constraint** | | UNIQUE(activity,someone) | | | | | | | | |

**D**ata **D**efinition **L**anguage:

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| CREATE SEQUENCE"History\_id\_seq"MAXVALUE 9223372036854775807 CYCLE;  CREATE TABLE"History"(  "id"int8 DEFAULT"nextval"('"History\_id\_seq"'::"regclass")PRIMARY KEY,  "activity"int4 REFERENCES"Activity"("id")ON DELETE RESTRICT ON UPDATE CASCADE,  "someone"int4 NOT NULL REFERENCES"Someone"("id")ON DELETE RESTRICT ON UPDATE CASCADE,  UNIQUE("activity","someone"),  "amount"int4,  "score"int2 NOT NULL DEFAULT'0',  "financialInstitution"int2 REFERENCES"FinancialInstitution"("id")ON DELETE RESTRICT ON UPDATE CASCADE,  "financialAccountHolder"varchar,  "financialAccountNumber"varchar,  "occurred"timestamp DEFAULT"now"(),  "agent"int4 REFERENCES"Someone"("id")ON DELETE RESTRICT ON UPDATE CASCADE,  UNIQUE("financialInstitution","financialAccountNumber")  );  ALTER SEQUENCE"History\_id\_seq"OWNED BY"History"."id";  COMMENT ON COLUMN"History"."id"IS'主鍵(長度64位元)';  COMMENT ON COLUMN"History"."activity"IS'外鍵:活動';  COMMENT ON COLUMN"History"."someone"IS'外鍵:會員';  COMMENT ON COLUMN"History"."amount"IS'金額';  COMMENT ON COLUMN"History"."score"IS'點數異動';  COMMENT ON COLUMN"History"."financialInstitution"IS'外鍵：金融機構';  COMMENT ON COLUMN"History"."financialAccountHolder"IS'金融帳戶戶名';  COMMENT ON COLUMN"History"."financialAccountNumber"IS'金融帳戶號碼';  COMMENT ON COLUMN"History"."occurred"IS'發生時戳';  COMMENT ON COLUMN"History"."agent"IS'外鍵:匯款人';  COMMENT ON TABLE"History"IS'歷程'; |

**D**ata **M**anipulation **L**anguage:

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Change Log:

1. 新增"score"(點數異動)欄位。

Applications:

* 當某紀錄(列)為**申請撥款**時"activity"(外鍵:活動)為NULL，"amount"(金額)應為撥款金額，且"score"(點數異動)需紀錄被扣除的點數；撥款完成後"agent"(外鍵:匯款人)記錄匯款人員。
* 當某紀錄(列)為**獲得點數**時"activity"(外鍵:活動)為該活動"id"(主鍵)但"amount"(金額)應為NULL，且"score"(點數異動)需紀錄被增加的點數。