A6: Indexes, triggers, user functions

|  |  |  |  |
| --- | --- | --- | --- |
| Relation Reference | Relation Name | Order of magnitude | Estimated growth |
| R01 | user | Tens | Units per day |
| R02 | event | tens | Units per day |
| R03 | location | tens | Units per day |
| R04 | image | tens | Units per day |
| R05 | City | tens | Units per day |
| R06 | country | tens | Units per day |
| R07 | Post | hundreds | Dozens per day |
| R08 | poll | tens | Units per day |
| R09 | option | tens | Units per day |
| R10 | FriendRequest | hundreds | Dozens per day |
| R11 | friendActivity | hundreds | Dozens per day |
| R12 | eventInvite | hundreds | Dozens per day |
| R13 | owner | Tens | Units per day |
| R14 | participant | tens | Units per day |
| R15 | done | tens | Units per day |
| R16 | notDone | tens | Units per day |
| R17 | admin | units | No growth |

and population

1. Database workload

A study of the predicted system load (database load), organizez in subsections

* 1. Tuple Estimation
  2. Most frequent queries

|  |  |
| --- | --- |
| Querie reference | SELECT01 |
| Querie description | User’s information |
| Querie frequency | Hundreds per day |
|  | |

|  |  |
| --- | --- |
| Querie reference | SELECT02 |
| Querie description | Event’s information |
| Querie frequency | Hundreds per day |
|  | |

|  |  |
| --- | --- |
| Querie reference | SELECT03 |
| Querie description | Search event |
| Querie frequency | Hundreds per day |
|  | |

|  |  |
| --- | --- |
| Querie reference | SELECT03 |
| Querie description | Search user |
| Querie frequency | Hundreds per day |
|  | |

|  |  |
| --- | --- |
| Querie reference | SELECT04 |
| Querie description | Search category |
| Querie frequency | Hundreds per day |
|  | |

* 1. Most frequent modifications

|  |  |
| --- | --- |
| Querie reference | UPDATE01 |
| Querie description | Update users |
| Querie frequency | Hundreds per month |
|  | |

1. Proposed Indexes
   1. Performance Indexes

|  |  |
| --- | --- |
| Index reference | IDX01 |
| Related queries | SELECT01 |
| Índex relation | user |
| Índex atribute | email |
| Index type | Hash |
| Cardinality | High |
| Clustering | No |
| Justification | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|  | |

|  |  |
| --- | --- |
| Index reference | IDX01 |
| Related queries | SELECT01 |
| Índex relation | user |
| Índex atribute | email |
| Index type | Hash |
| Cardinality | High |
| Clustering | No |
| Justification | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|  | |

|  |  |
| --- | --- |
| Index reference | IDX01 |
| Related queries | SELECT01 |
| Índex relation | user |
| Índex atribute | email |
| Index type | Hash |
| Cardinality | High |
| Clustering | No |
| Justification | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|  | |

* 1. Full-text search indexes

|  |  |
| --- | --- |
| Index reference | IDX01 |
| Related queries | SELECT01 |
| Índex relation | user |
| Índex atribute | email |
| Index type | Hash |
| Cardinality | High |
| Clustering | No |
| Justification | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |
|  | |

1. Triggers

|  |  |
| --- | --- |
| Trigger reference | TRIGGER01 |
| Trigger description | Na item xxxx |
|  | |

|  |  |
| --- | --- |
| Trigger reference | TRIGGER02 |
| Trigger description | Na item xxxx |
|  | |

|  |  |
| --- | --- |
| Trigger reference | TRIGGER03 |
| Trigger description | Na item xxxx |
|  | |

1. SQL code