EG-M42 Software for Smartphone:
List Handling with TinyDB

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Outline

- Phonebook based on TinyDB

- Contacts based on TinyDB

Phonebook based on TinyDB: Overview of TinyDB

- Data are stored as a table of ***tag-value*** pair.

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Tag	Value
Joseph Kim	01792602024

  - Two main blocks for DB operations
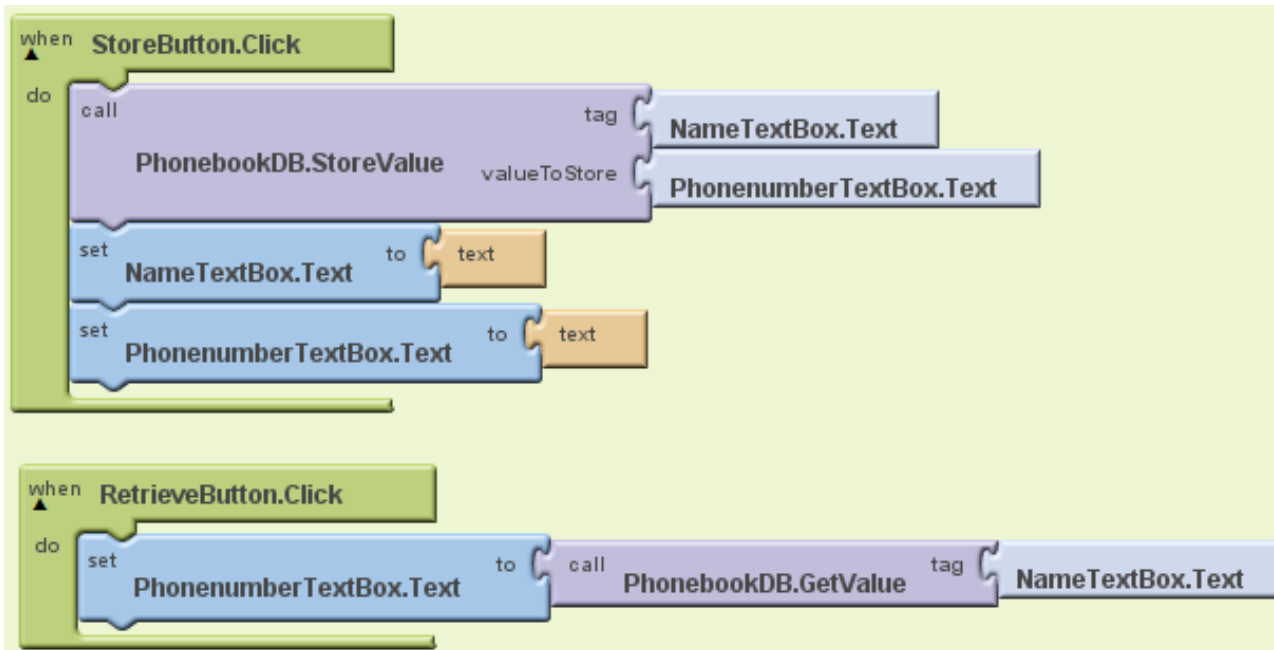   - GetValue
      - Input: tag
      - Output: value
    - StoreValue
      - Input: tag, valueToStore
      - Output: none

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Phonebook based on TinyDB

Contacts based on TinyDB: Changes

- Now additional fields, e.g., email address and Skype ID, can be stored as well.

- We will maintain **nameList** for names already in the DB.

  - Before storing a new field name-field value pair, a given name is checked against the *nameList*.

    - If it is already in the list:
      - Retrieve the corresponding data from the DB (i.e., list of (field name, field value)).
      - Augment the list with a given pair.
      - Store the list (as a value) with the name (as a tag).

    - Otherwise:
      - Add the name to the *nameList*.
      - Store the pair with the name.

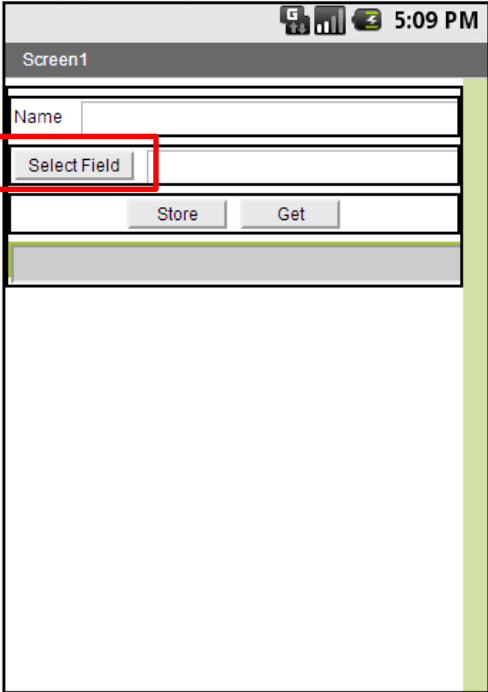Swansea University
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Variables

- *nameList*: Names already in DB
- *fieldList*: (*fieldNameList*, *fieldValueList*)
  - *fieldNameList*: List of field names (e.g., phone, email, skype)
  - *fieldValueList*: List of field values
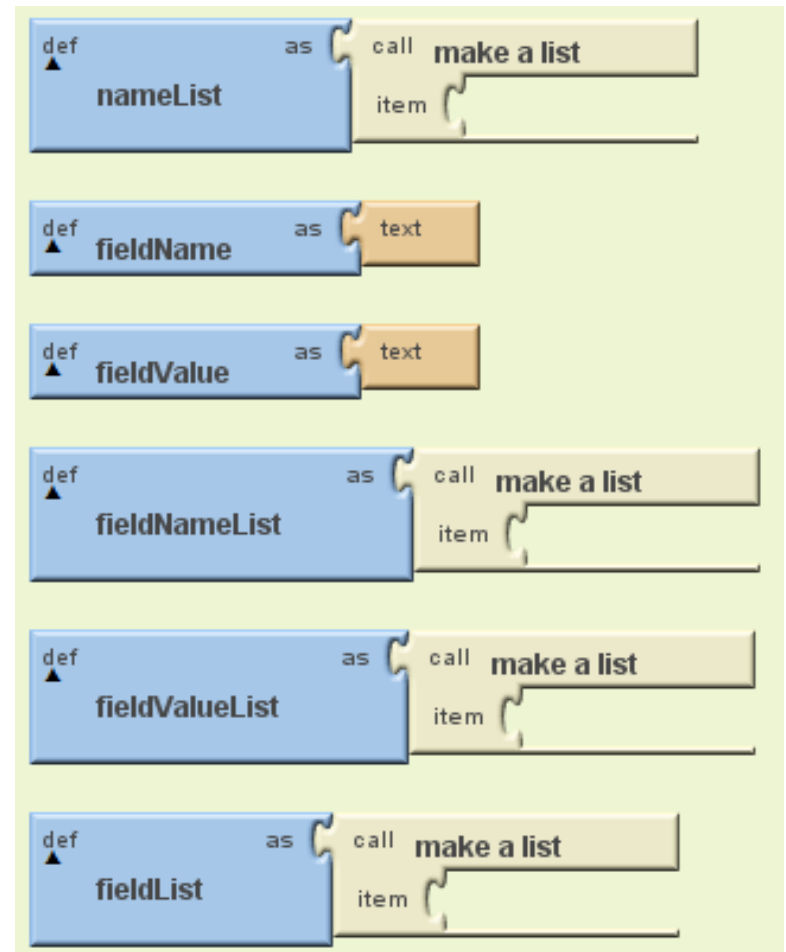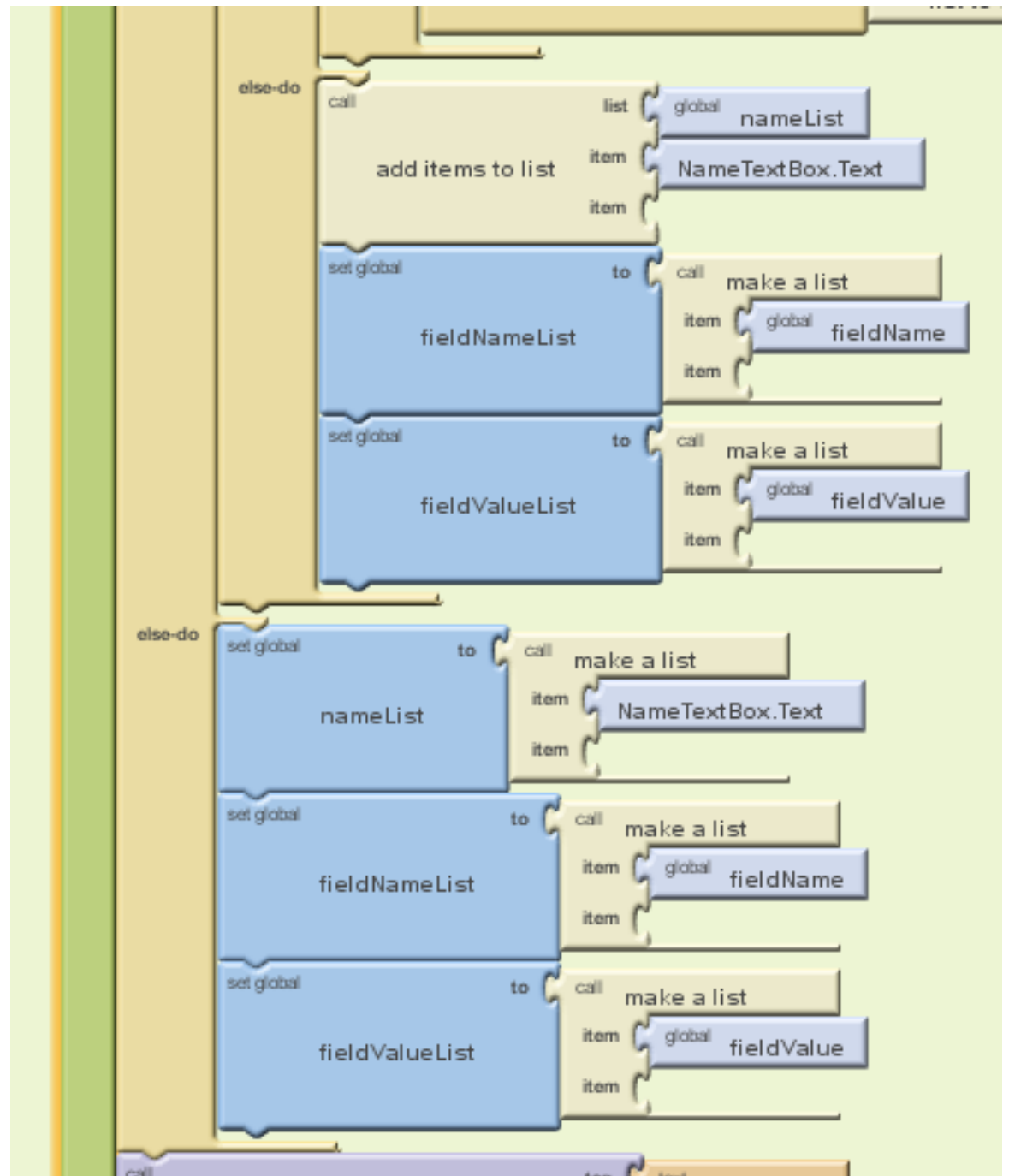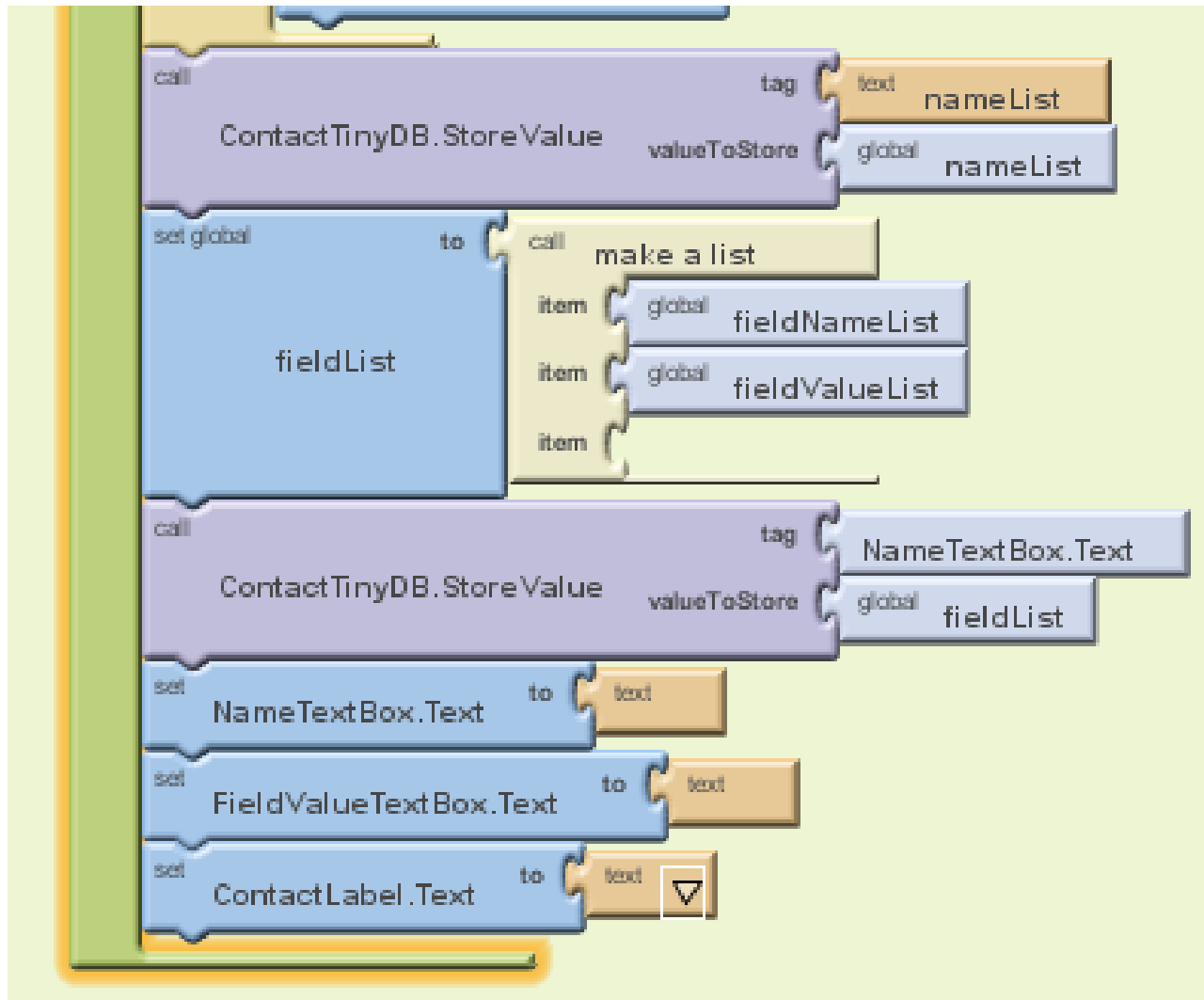
Field Name Selection

Store: When Name is already in DB
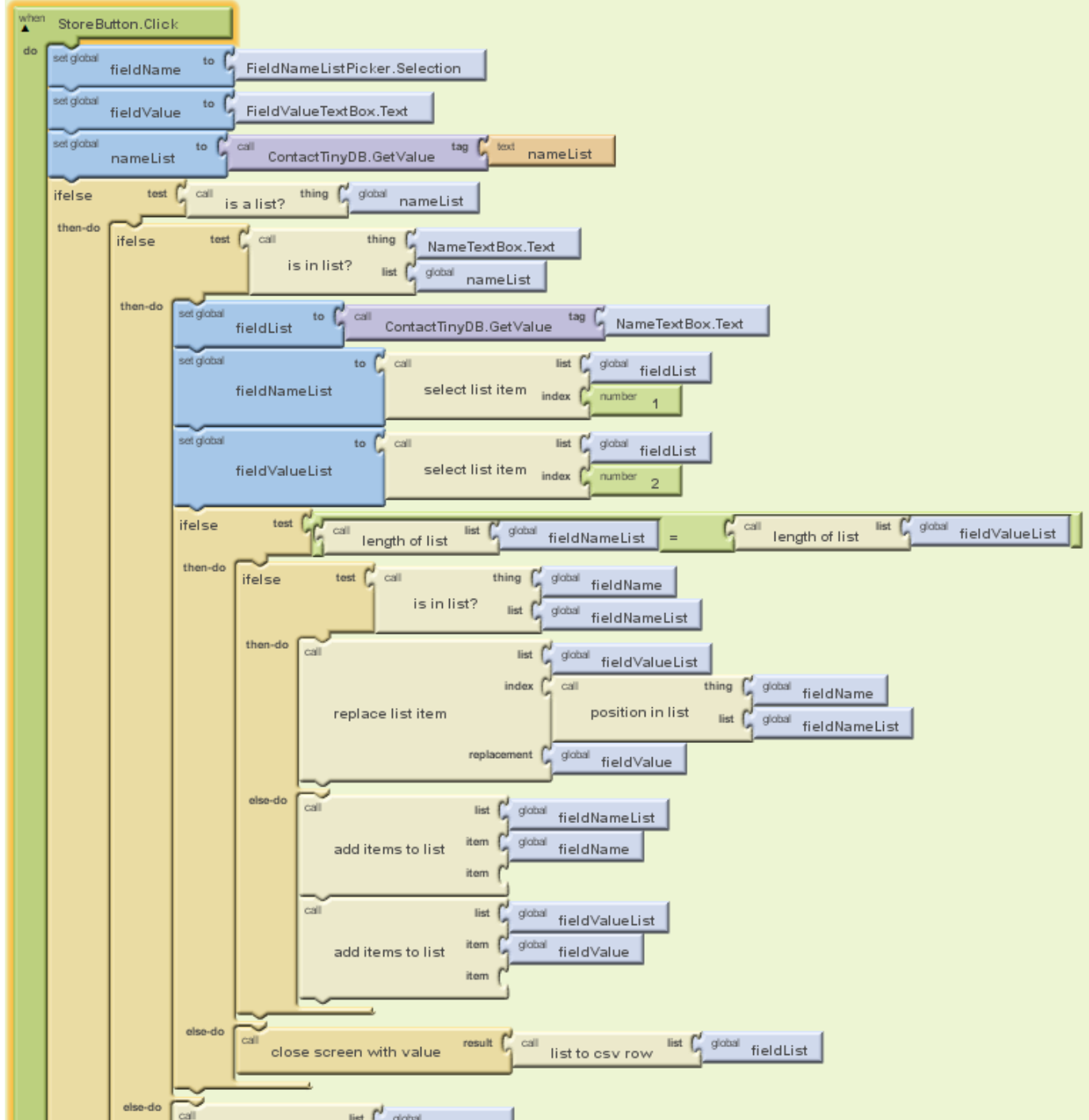
Store: When Name is not in DB

Store: Store Values to DB

Get