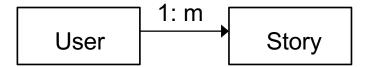
ITIS 5166 Network-Based Application Development

Associate Users and Stories

Relationships between Users and Stories

- A user may create multiple stories
- A story has one author



- Embed user inside story is not a good choice as there will be data duplication
- Embed story inside user is not a good choice as stories are not always viewed together with users
- Reference stories inside user will result in a mutable array
- We will model this relationship by reference the user inside story documents

Story Schema

- If a field of a document stores the _id of a document in another collection, then the field is defined with two properties:
 - type: schema.Types.ObjectId
 - ref: model name
- Example: the story schema's author field stores the id of its author

```
author: { type: Schema.Types.ObjectId, ref: 'User'},
```

Join Collections

- MongoDB supports join operation to combine the fields of two documents from different collections
- In Mongoose, call populate() method on a document automatically replaces a field in the document with document from other collection
- Example:

```
story.findById(id).populate('author')
story.findById(id).populate('author', 'firstName')
Mongoose populate
```

Demo: Associate Users and Stories