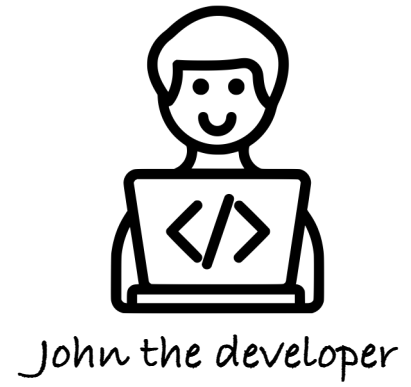
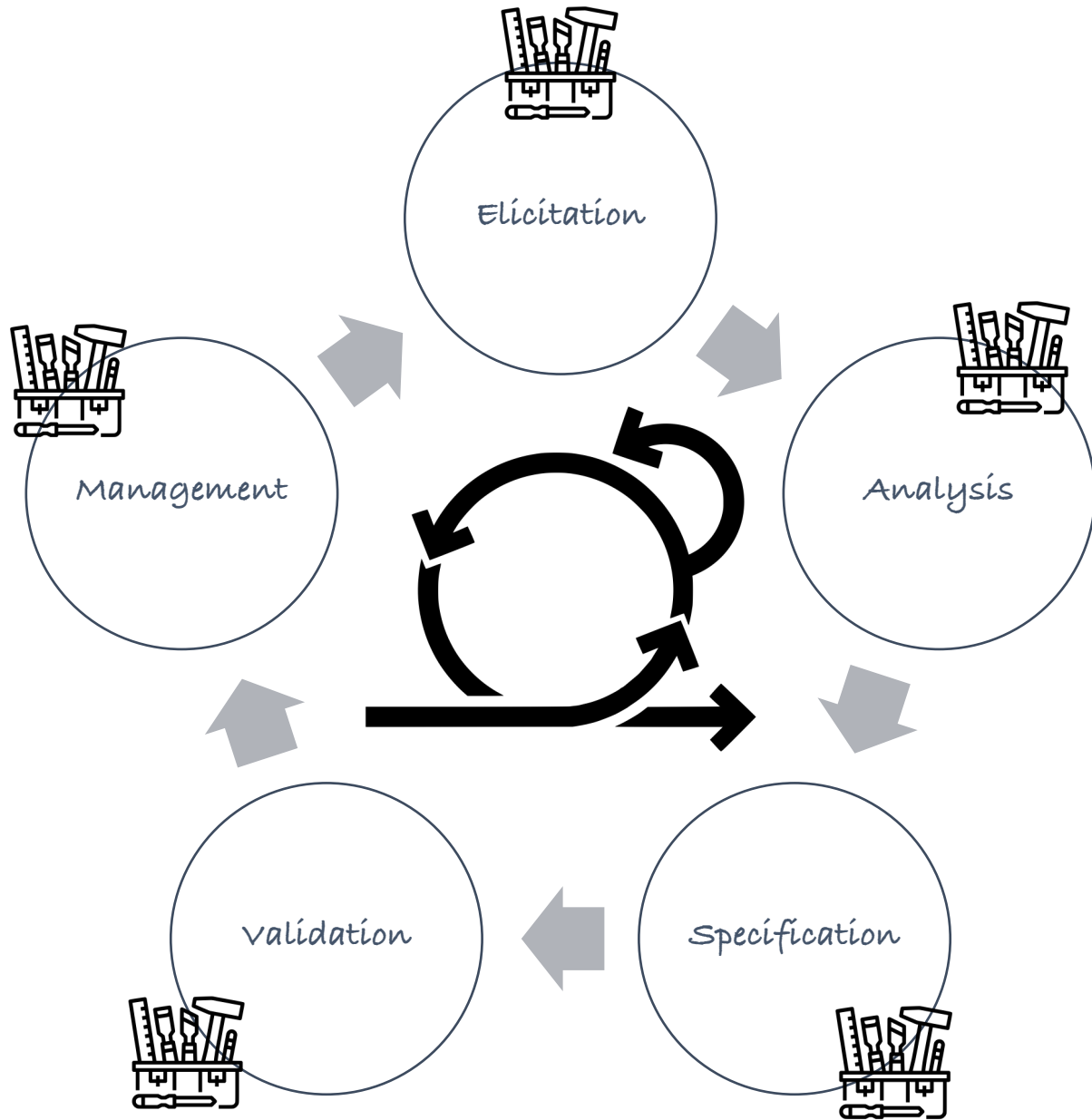


Moldable Requirements

Nitish Patkar
Software Composition Group

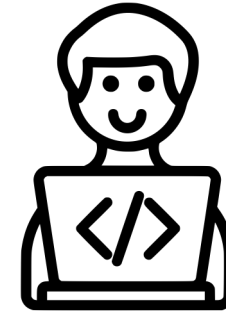
Ph.D. Research Proposal



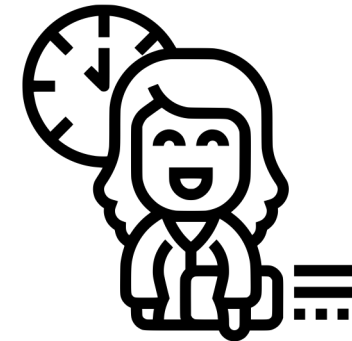
Issues

Tedious collaboration

Broken traceability



John the developer



Nina the product owner

Use an IDE for requirements engineering as a *solution*

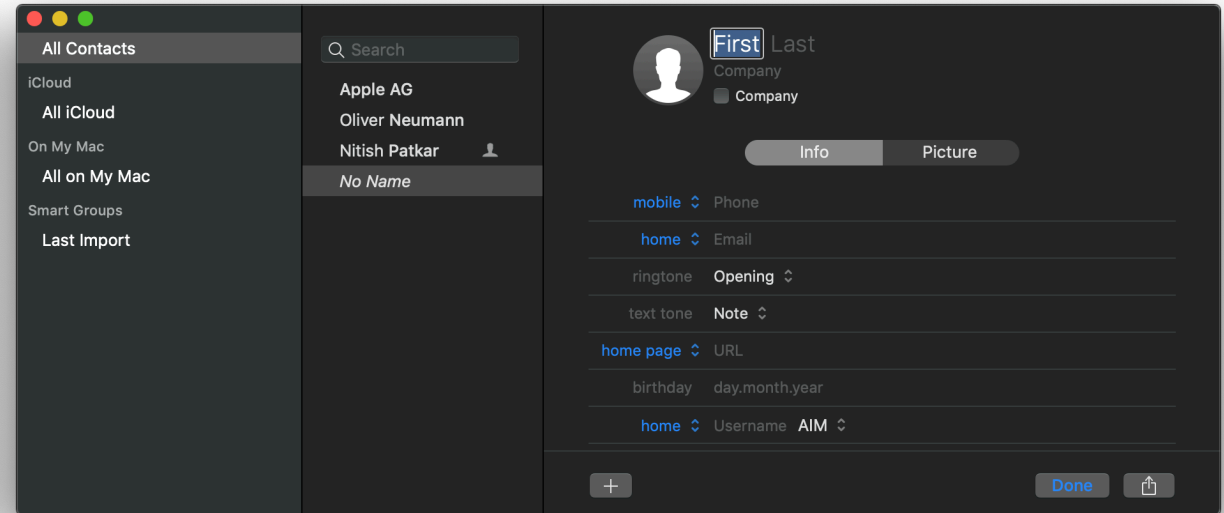
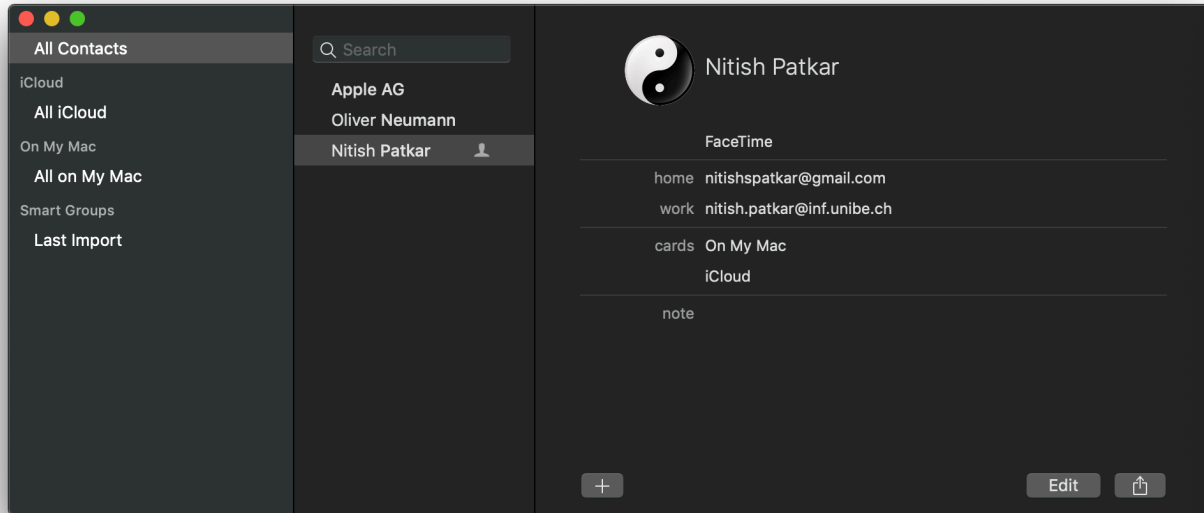
How to make an IDE usable for distinct stakeholders?

Numerous requirements *formats* and *artifacts* are used

Moldable Requirements

Create requirements (i.e., formats, artifacts) as first-class entities in an IDE

Mold (i.e., adapt) requirements hierarchies, as well as their representations



- Add contact
- Edit contact
- Delete contact

- * Merge contacts

- ..

- ..

- * Manage address book

- Add contact

- Edit contact

- Delete contact

- * Search address book

- ..

* Merge contacts

- ..

- ..

* Manage address book

- Add contact

- Edit contact

- Delete contact

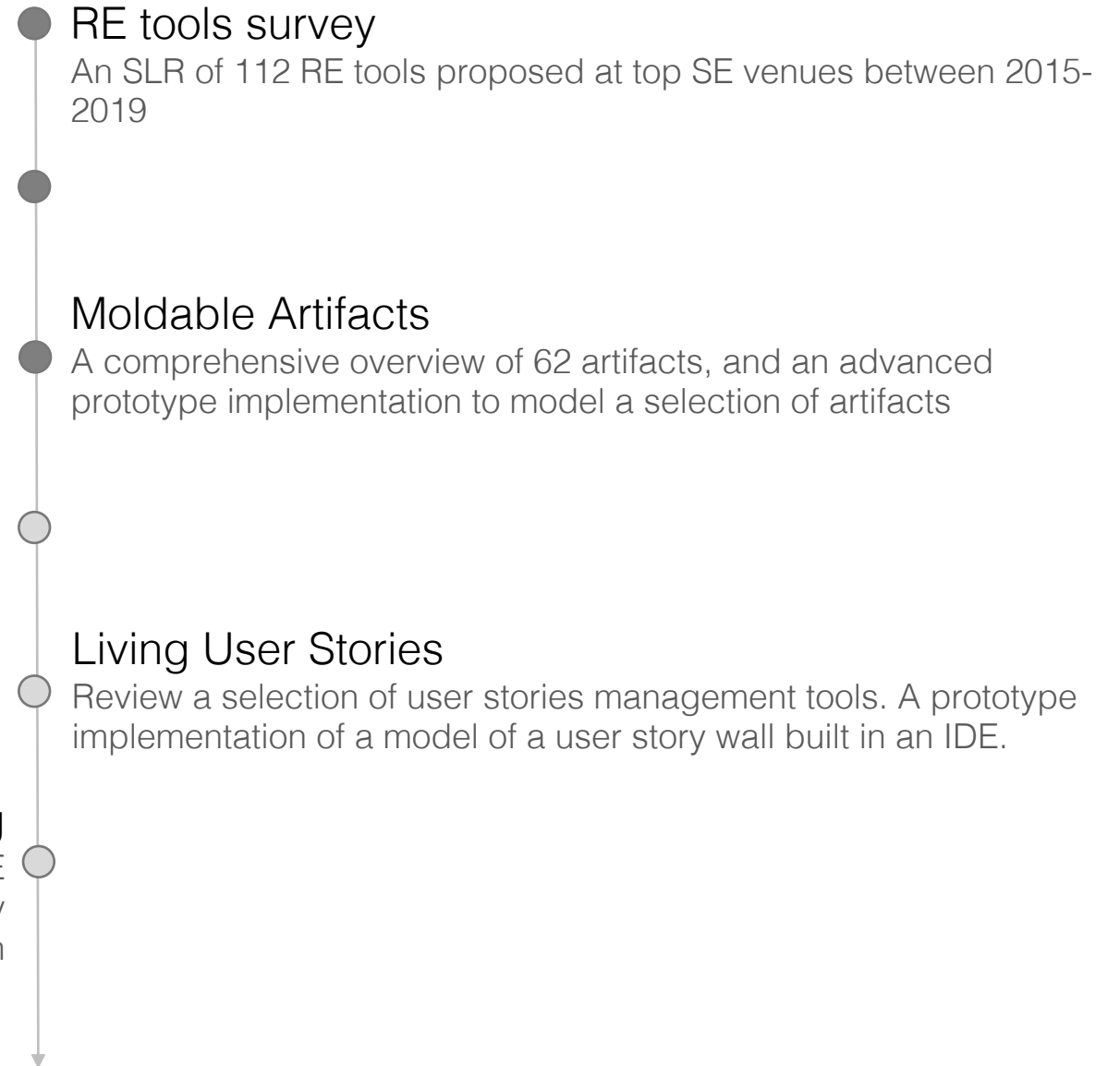
- Contact

* Search address book

- ..

Demo

Domain and project specific interfaces will enable collaboration and ease requirements management



Moldable Scenarios

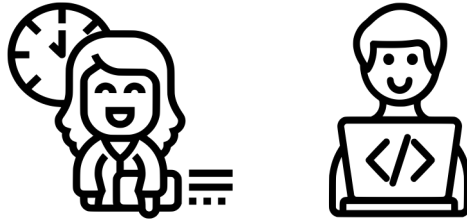
A review of 14 popular BDD tools, proposes an approach and an advanced prototype implementation to improve the BDD process

Glue Code Survey of BDD Tools

A study that takes a closer look at the glue code characteristics of the projects that use BDD tools

Graphical Actor Modeling

Study the characteristics of graphical modeling tools and their IDE support. We will present an advanced prototype to graphically create actors of a domain



gt Playground

Glamorous Toolkit

an ERequirementContainer(AddressBookApp)

View Details Requirements Tree Story Wall Mind Map Raw Print

- ▶ Epic: Search address book
- ▼ Epic: Manage address book
 - ▼ Use Case: (Title:Add a contact , Task: Add a new contact to address book)
 - ▼ Use Story: (As a user, I want to add a contact)
 - ▶ Scenario: (Description: Add a new contact)
 - Scenario: (Description: add a duplicate type address to a contact)
 - ▶ Use Case: (Title:Edit a contact in an address book , Task: Edit contact details)
 - ▶ Use Case: (Title:Remove a contact from address book , Task: Remove contact)
 - ▶ Epic: Search address book

an EScenario

Examples Parametrized examples

| Ind | Method |
|-----|--|
| 1 | Add a given contact to an address book |

New parameterized example

an EParametrizedExamp

Pick Examples Edit Raw ▶ Run

Add a new contact

aContact: Empty Jane Doe

aBook: Book with john doe

Generate

an ABAddressBook

Contacts list Cards Raw Print Connections Meta

John Doe

+41 123456789
Hochschulstrasse 6 3012 Bern Switzerland

Jane Doe