

# Requirements Elicitation Mobile

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# **INTRODUCTION**

# Essential terms

**Requirements elicitation** - The process of discovering and collecting a project's requirements

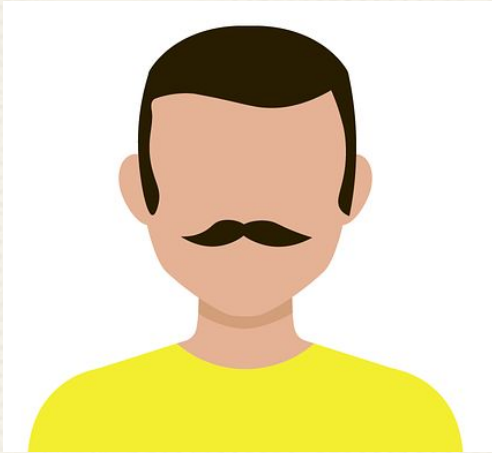
**Stakeholder** - The people and organizations affected by a project.

Examples:

- Developers
- Shareholders
- Clients

We will focus on the clients

## Practical Example



### Andrew

- Stakeholder
- Defines and changes requirements



### Bill

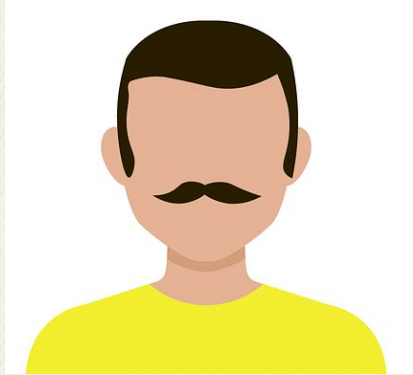
- Requirements Engineer
- Collects requirements and analyzes them



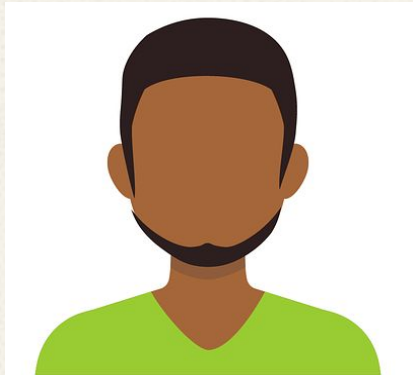
### Carl

- Developer
- Writes code to suit the requirements

## The Problem



Andrew is not sure about the requirements and keeps changing them



Carl has to adjust the code to adapt to the changes

Frequent changes increase confusion

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## The Challenge

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- **Requirements can change frequently**
  - Poorly defined requirements
  - Technological evolution
  - Changing expectations
  - Requirements elicitation (RE) is moving towards a stakeholder-centric model - higher volatility
  - Mobile devices used more and more in RE
  
- **This can have massive implications on the development process**



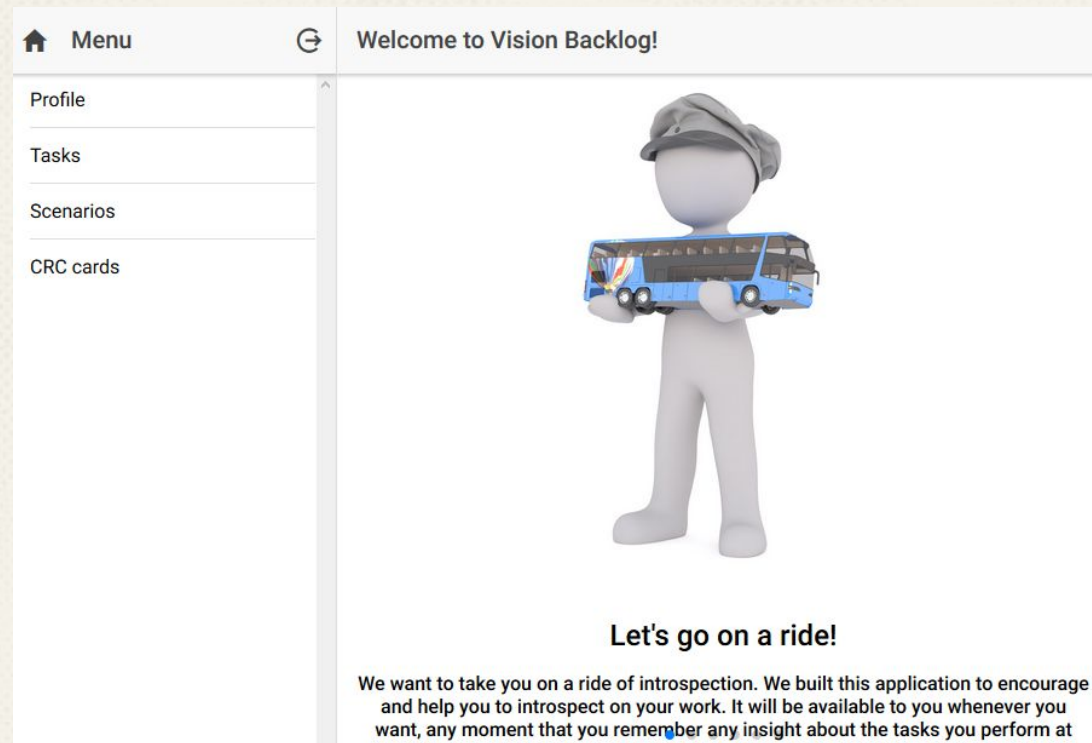
## The Challenge



- Bill's role - act as a mediator between the two
- Detect the requirement changes as quickly as possible
- Convince the stakeholders what impact their actions have on the development process

# Vision Backlog

- Requirements elicitation platform
- Supports mobile devices
- Define, edit and delete user stories
- Stakeholders have more initiative
- Dedicated analyst application



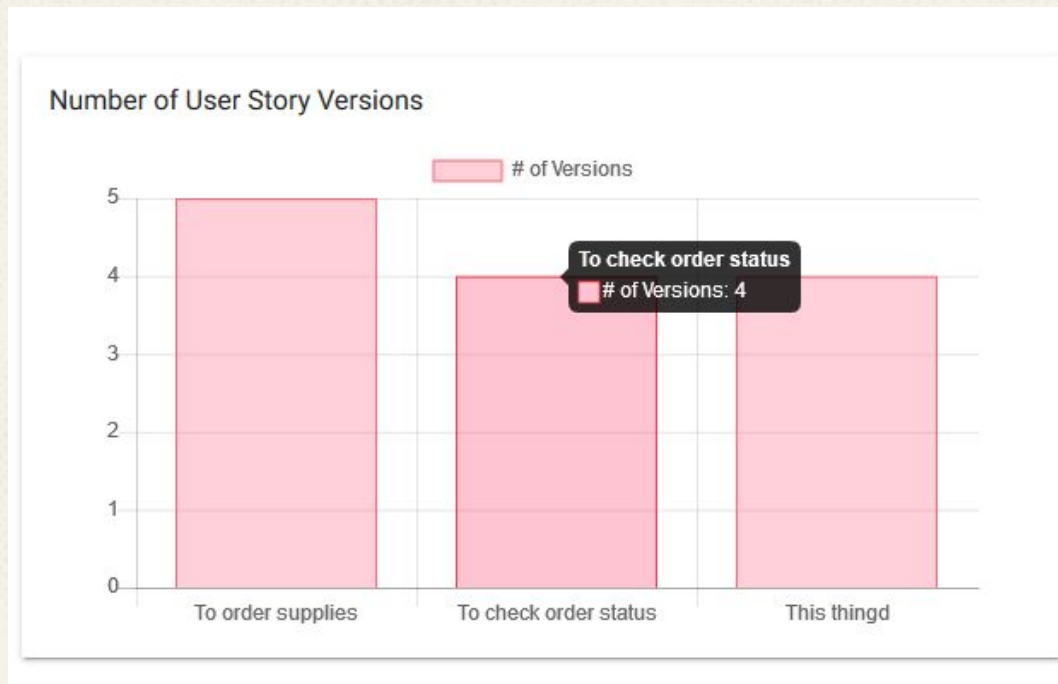


## Vision Backlog

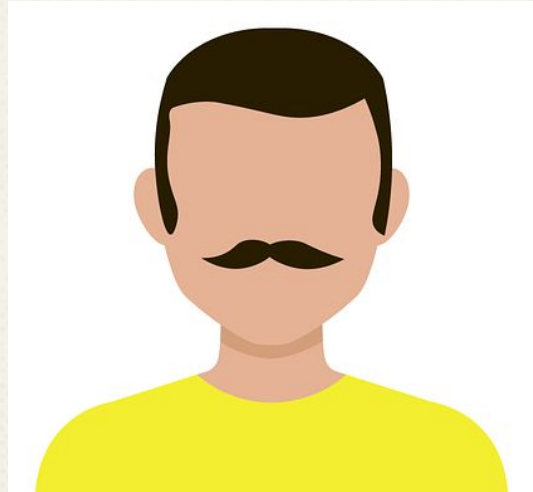
- A key functionality - identification of probable classes and methods for each requirement
  - Nouns -> classes
  - Verbs -> methods
- Changes to them are of significance to the development team
- Analysts need to keep track of these changes

# Vision Backlog

- **New feature: requirement traceability**
  - Versioning of user stories
  - Overview of requirement changes
  - Visual evaluation of development process changes



## An Example User Story



1. To have a live video tutorial on the website

2. To upload a video

3. To put a YouTube video on the website



**LIVE DEMO**

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## Ideas for Future Work

### **Social Networking**

User feedback on requirements

### **Gamification**

Score system

### **Threat Modeling**

Identification and evaluation of assets and threats

Vulnerable assets are emphasized

Track asset changes continuously

Adjust and deploy countermeasures



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# Summary

## **Volatility**

Changes likely to increase as stakeholders gain more control over requirement definition

## **Communication**

Requirement analysts need to keep changes in check and talk to stakeholders

## **Visualization**

Visual representation of requirement changes can be used to demonstrate impact on development process