

# Awareness meets requirements management: Awareness needs in Global Software Development



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# Basis

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- In GSD, stakeholders are distributed from each other physically
- Totally co-located development benefits from zero-cost awareness



# Awareness as a Problem in Requirements Engineering

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- Awareness is tacitly knowing what is going on
- Awareness is maintained through interaction with the environment
  
- Requirements provide context for developers: what is needed, for who, why
- Even in co-located environments RE awareness is limited



# Problem

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- Workspace awareness is impeded in GSD
- In requirements management, what aspects of requirements engineering and management are important for stakeholders to be aware of?



# Requirements for awareness

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- Allow project stakeholders to seek existing information
- Support stakeholders in decision making
  - Assigning responsibilities and managing a project
  - Gathering and managing estimation data
  - Impact analysis
- Decision notification



# Approach

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- Immerse ourselves in the constraints of GSD
- Pursued a 'mini' GSD development cycle
- While evaluating current, ad hoc approaches to collaboration

# GSD Interactions during investigation



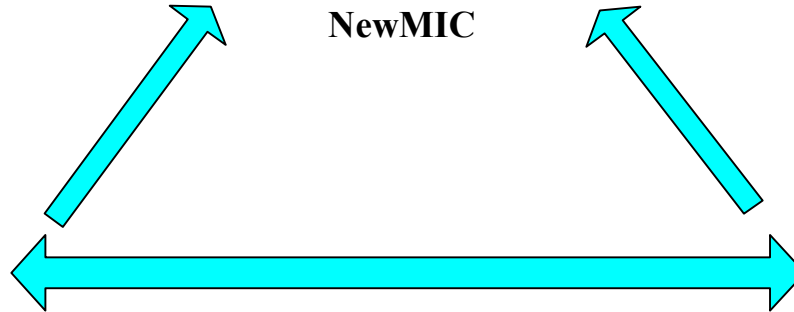
**NewMIC**



**GIL Lab**



**CHISEL Lab**





# Elaboration of Requirements

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## **The system should:**

- **Allow project stakeholders to seek existing information**
- **Support stakeholders in decision making**
  - **Assigning responsibilities and managing a project**
  - **Gathering and managing estimation data**
  - **Impact analysis**
- **Allow for decision notification**





# Elaboration of Requirements

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## **The system should:**

- **Allow project stakeholders to seek existing information**
- **Support stakeholders in decision making**
  - **Assigning responsibilities and managing a project**
  - **Gathering and managing estimation data**
  - **Impact analysis**
- **Allow for decision notification**



# Elaboration of Requirements

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## **The system should:**

- **Allow project stakeholders to seek existing information**
- **Support stakeholders in decision making**
  - **Assigning responsibilities and managing a project**
  - **Gathering and managing estimation data and progress information**
  - **Impact analysis**
- **Allow for decision notification**



# Elaboration of Requirements

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## **The system should:**

- **Allow project stakeholders to seek existing information**
- **Support stakeholders in decision making**
  - **Assigning responsibilities and managing a project**
  - **Gathering and managing estimation data**
  - **Impact analysis**
- **Allow for decision notification**



# Elaboration of Requirements

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## **The system should:**

- **Allow project stakeholders to seek existing information**
  - **Including meaningful interface with email archive**
- **Support stakeholders in decision making**
  - **Assigning responsibilities and managing a project**
  - **Gathering and managing estimation data**
  - **Impact analysis**
- **Allow for decision notification**



# Feedback, Questions and Comments

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