A conceptual model for an Automated Land Information Machine (ALIM)

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Introduction

- GIS technology and Land information:
  - Affect our behavior
  - Web based GIS and LIS
  - Online delivery, electronic transfer and sharing data

- Purpose:
  - Public access to land information?
  - Locating land objects, properties, and rules?
  - Conceptual model for an ALIM?

ALIM basic concepts

- Electronic device
- Electronic user’s card
- Interface: card reader, numeric keyboard, screen
- Output device: editing sheets and small maps
- Driving directions from/to locations
- Land property information
- Tax information on properties

How to function?

- Consortium of land information offices/map agencies
- Providing data to share via ALIM
- Consortium server: connection offices/agencies
- Interaction with public users: ALIM

ALIM system

Mission: consortium/members

- Consortium:
  - standards and guidelines
  - Determine fair fees to pay by agencies as memberships
- Members:
  - Develop computerized applications
  - Provide services for users.
The conceptual model

- **Method:** Unified Modeling Language (UML)
  - Best of the notations used in the early of 1990s
  - Originated from Unified Method: Rumbaugh & Booch (rational corporation)
  - Ivar Jacobson (1992): add use cases concepts
  - UML # conceptual method: notational language
- **Concepts:** design ALIM
  - Use cases
  - Class diagrams
  - Interaction diagrams

Conclusion

- **New perspective for developing an ALIM**
  - Public Sharing and distribution of land information
  - Design steps are developed
- **Future efforts**
  - Financial aspects
  - Legal aspects
  - Case study: feasibility