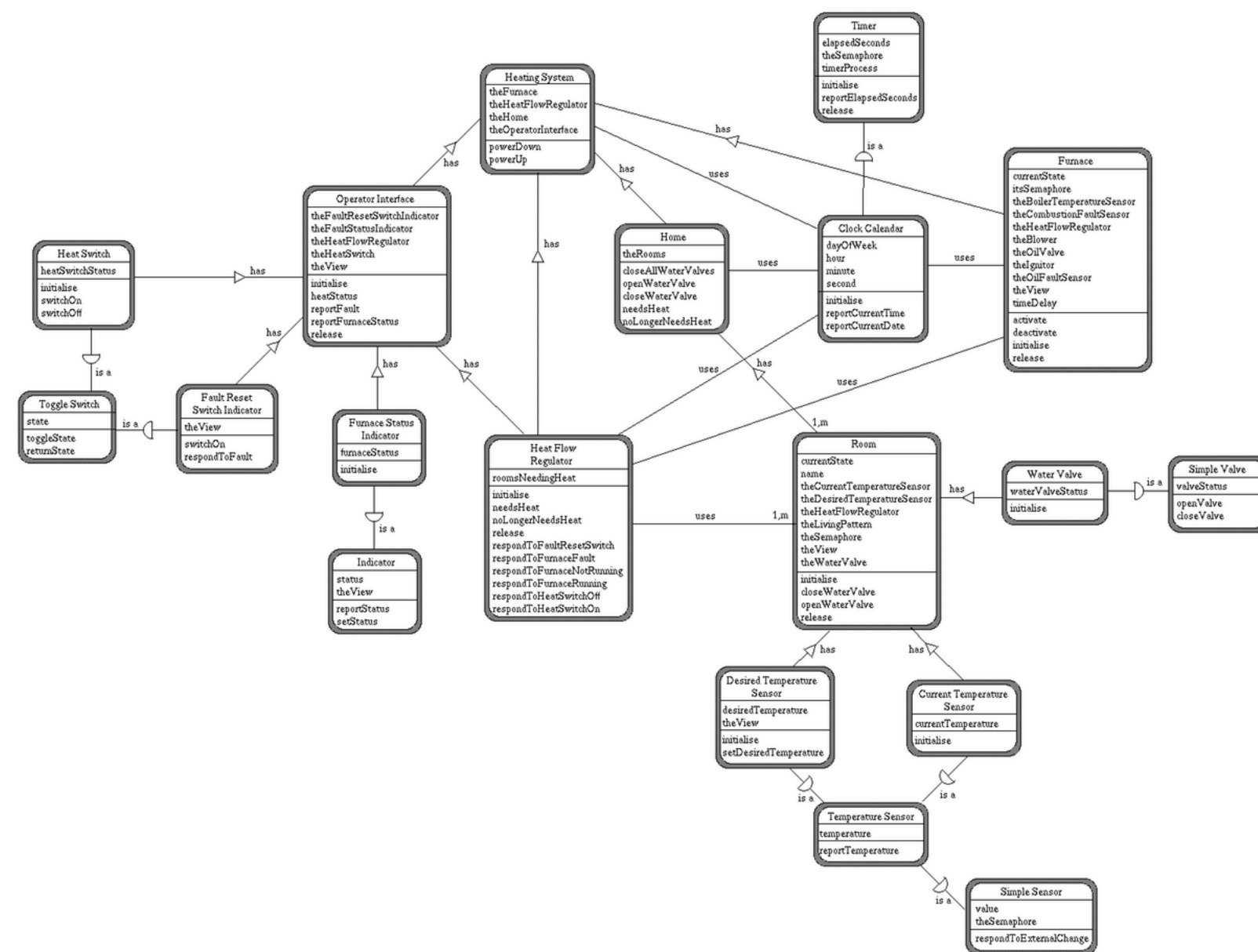# MOBILE APPLICATION DEVELOPMENT

ANDROID (2017)

LECTURE 17: SPECIFICATIONS

FINAL PROJECT

▸ Final projects will be starting soon. Final projects should be:

   ▸ A significant (50+ Hours) amount of work.

   ▸ Applications which address an actual need.

   ▸ Software which someone would possibly buy (high quality).

   ▸ Complete, stable, and well-tested.

   ▸ Visually appealing, polished, and interesting.

SPECIFICATIONS

▸ Working effectively on any significant software project requires some level of specifications to be created.

▸ Not a complete, waterfall-style specification, but at least some level of requirements.

▸ Should describe expectations for the software's functionality, but does not need to contain specifics about the implementation details.

▸ Should be flexible enough to accommodate change and revision as the project evolves. Should also be maintained and updated throughout changes.

DESIGN PROCESS

▸ While there are many ways to design a product, the process generally consists of a series of relatively-universal steps:

  ▸ Generating Ideas: Coming up with high-level ideas to work on.

  ▸ Refining Ideas: Updating initial ideas to be more realistic and concrete.

  ▸ Wire Frames: Coming up with diagrams or flow charts describing the system.

  ▸ Mockups: Converting wire frames into implementation-quality design guidelines.

  ▸ Implementation: Actually converting ideas and mockups into code.

  ▸ Testing: Ensuring that the implementation actually works.

  ▸ Quality Assurance: Ongoing testing and refinement in response to issues in released code.

PRODUCT LIFECYCLE

▸ Design and implementation are only one step of the overall product lifecycle:

  ▸ Construction: Design, specification, and implementation of the product.

  ▸ Maintenance: Adding needed features, fixing bugs, providing support.

  ▸ Marketing: If people don't know the product exists, it doesn't matter.

  ▸ Iteration: Making new major versions, adapting to the market.