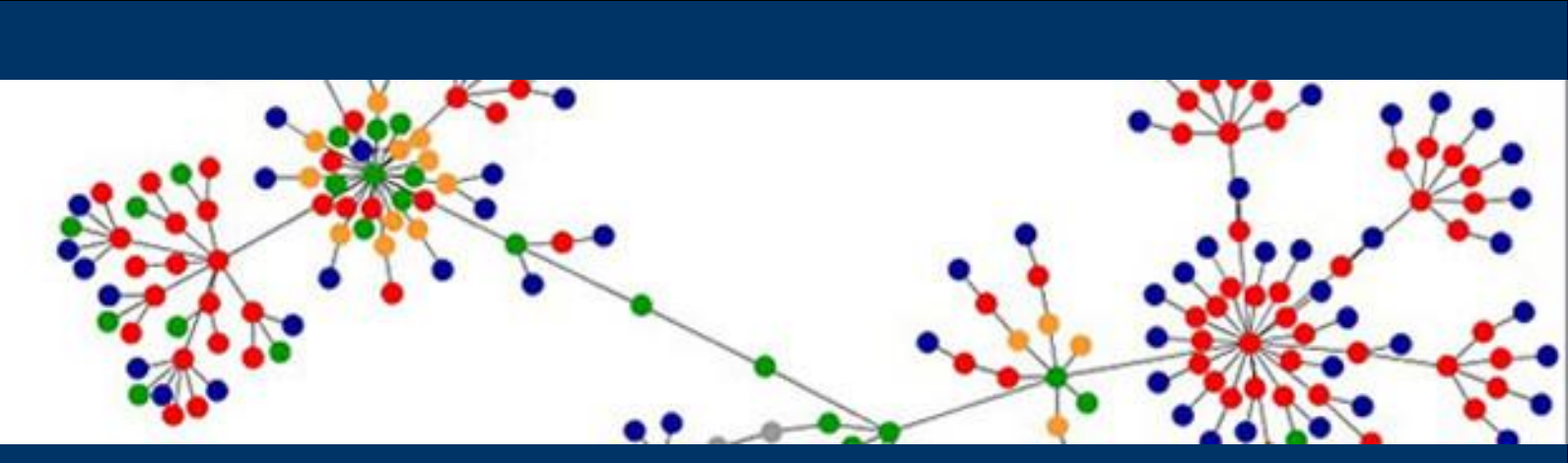


Campus Mysteries

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fAR-PLAY: Motivation and Overview

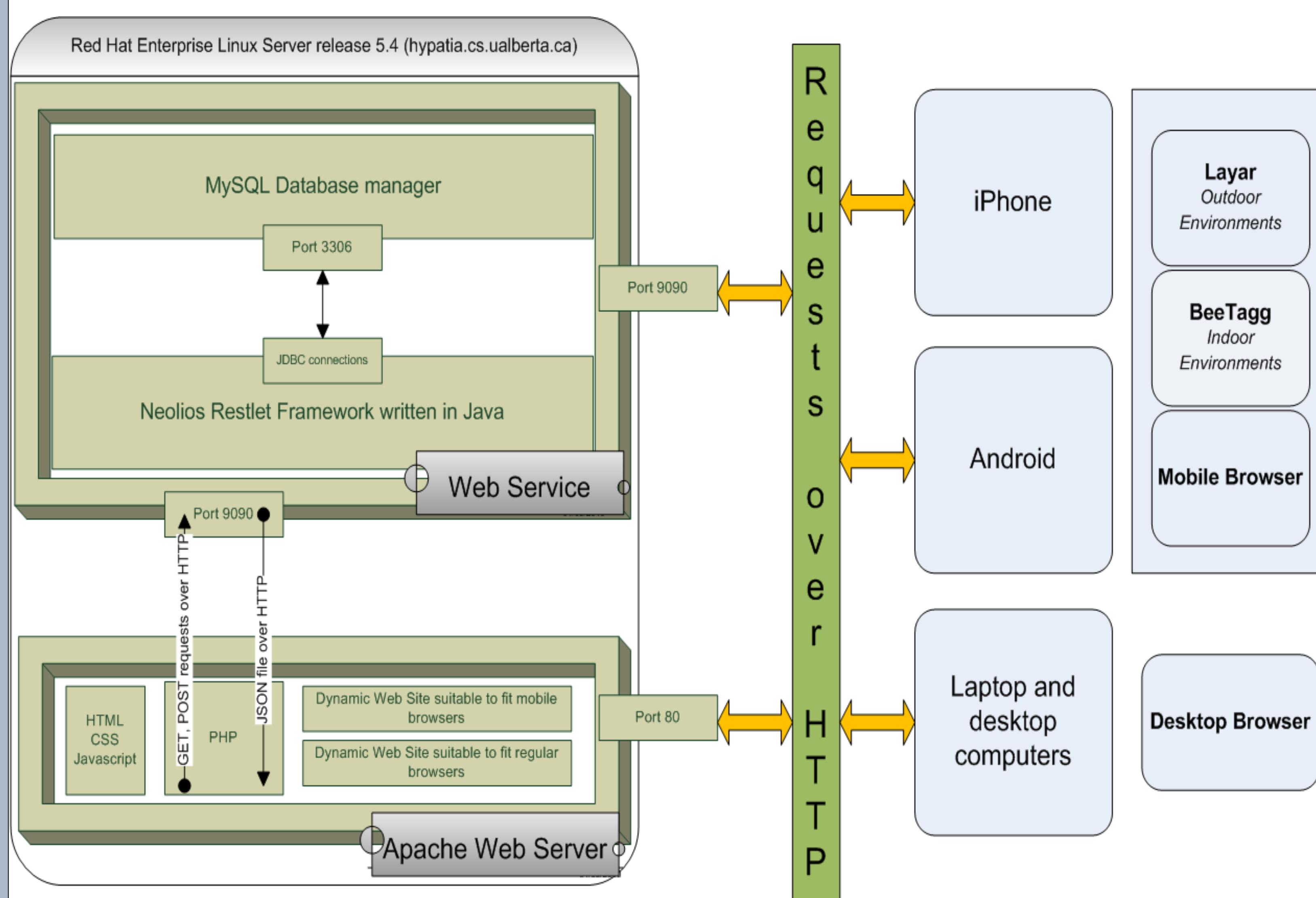
Motivation:

1. Situated-learning environments as indoors/outdoors games
2. Development of different types of knowledge (domain specific facts) and skills (navigation, collaboration)
3. Games as exercise motivators for developing healthier lifestyles, including physical activity.

The **fAR-PLAY** (for Augmented Reality Play), an Augmented/Alternate Reality Games Framework :

- Games are played in parallel in the real world and in (multiple) virtual world(s).
- Time may flow faster in the virtual world to explore alternative scenarios.
- Data input from different type of hardware devices.
- Study of mobility patterns in different scenarios.
- GPS localization for outdoors, QR Codes for indoors.
- Collaboration between characters of the real- and virtual-world environments.

Campus Mysteries: Software Architecture

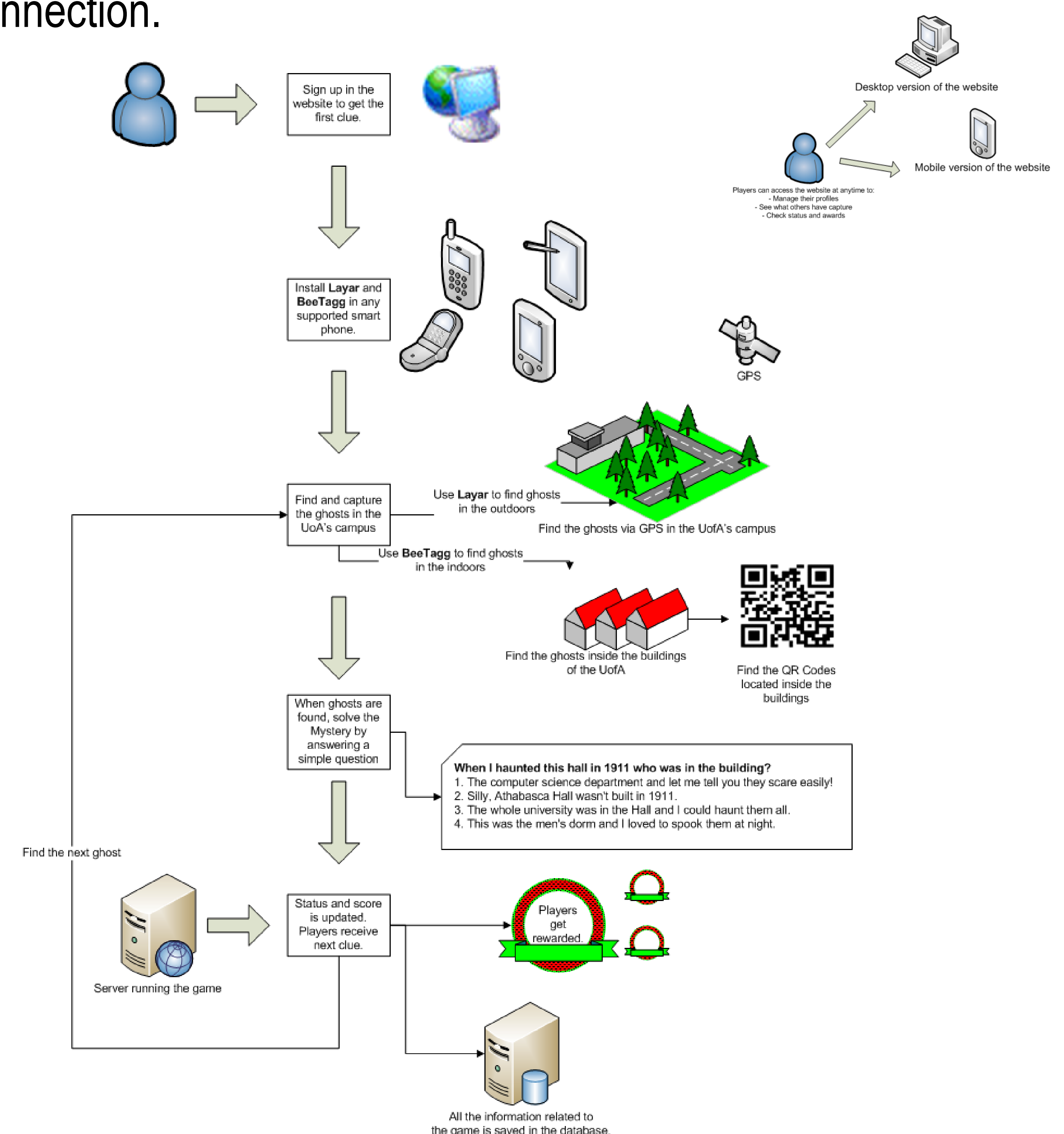


Campus Mysteries is an **Augmented Reality Game** implemented as a **client-server software application**. The **Software Architecture of Campus Mysteries** is composed by:

- MySQL Database.** Used to store all the information related to the game.
- RESTlet Engine.** A Java framework used for writing and exposing the core functionality of the game as RESTful APIs.
- Apache Web Server.** Runs the website of the game and acts as bridge between the RESTlet Engine and the mobile apps.
- Mobile Applications.** Layar for the outdoors and BeeTagg for the indoors.

Campus Mysteries: Game Overview

- Game Overview:** Augmented Reality Game developed by the GRAND Network Centre of Excellence team of the University of Alberta (UofA).
- Objective:** Capture all the ghosts hidden inside the buildings of the University of Alberta.
- Game Characters:** Ghosts of the University of Alberta's past.
- Setting:** Set in the real world as well as in present time.
- Challenges:**
 - a) Find all the ghosts hidden in the UofA's campus,
 - b) solve the mysteries and find the clues,
 - c) answer the final question,
 - d) complete the game fast.
- Location:** The campus of the University of Alberta.
- Tools:** Any smart phone equipped at a minimum with a GPS, an electronic compass, a digital video camera, and wireless Internet connection.



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