

Process Assistant

Author(s) – Ernest Lie, Prashanthan Ranjan
Research Theme: Towards Personal Process Management

Motivation

Business processes are a set of structured tasks set out to achieve a business goal. Personal processes on the other hand are repetitive day-to-day activities relevant at a personal level. At the moment there are currently many tools that support business process execution, but none for personal processes.

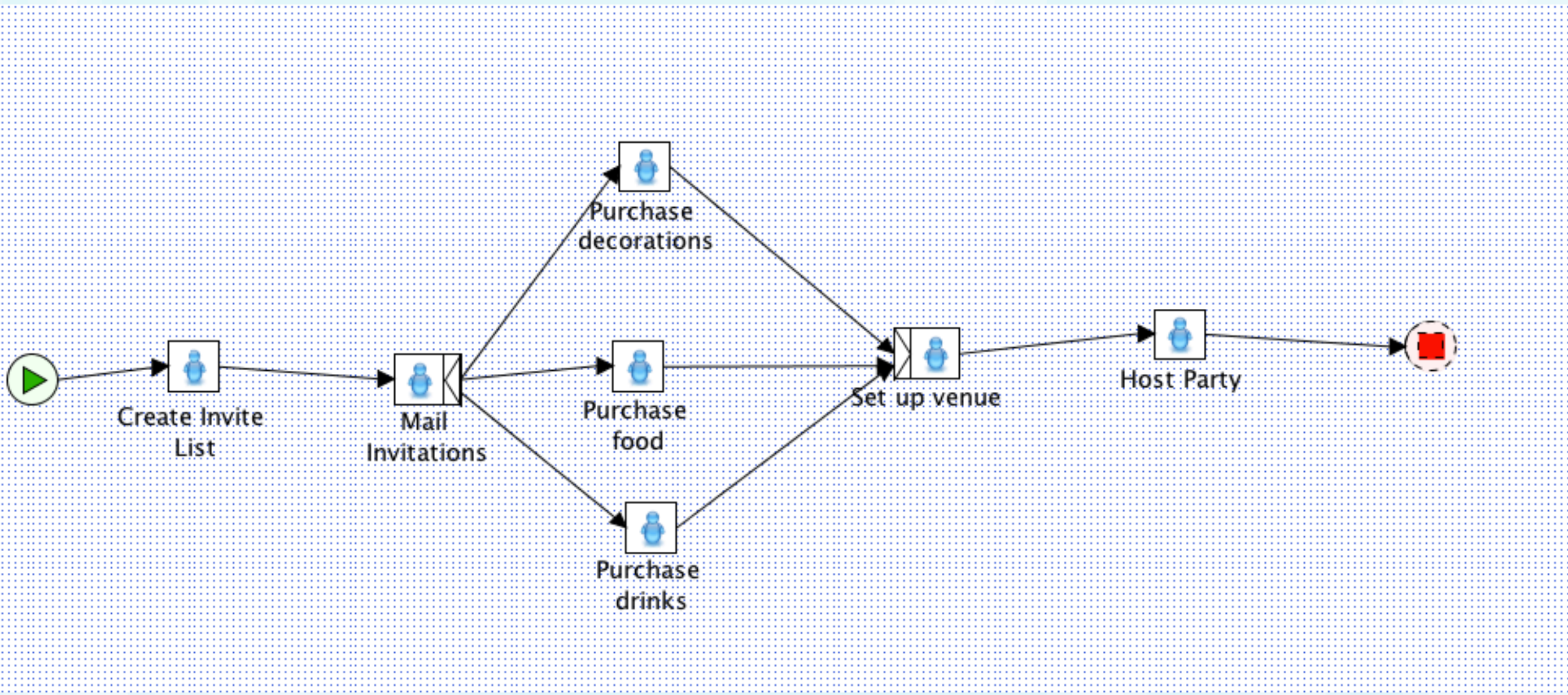
The lack of support for personal processes can be attributed to the different nature of personal processes. Personal processes differ to business processes in the sense that many of the tasks that personal users prefer to do cannot be automated. This means that personal processes are by nature, more manual and are mostly partially automatic in their execution.

Personal processes are also in a sense, much more flexible in the order of how we would like to do things. Users may prefer to do things out of sequence while business processes are much more strict and rigorous in how they are defined.

These two concepts mean personal processes are very loosely structured, highly variable and that applying the automated tools currently out there for business processes would not be suitable on a personal level. As a result, there is very little support provided for those individuals attempting to complete personal processes.

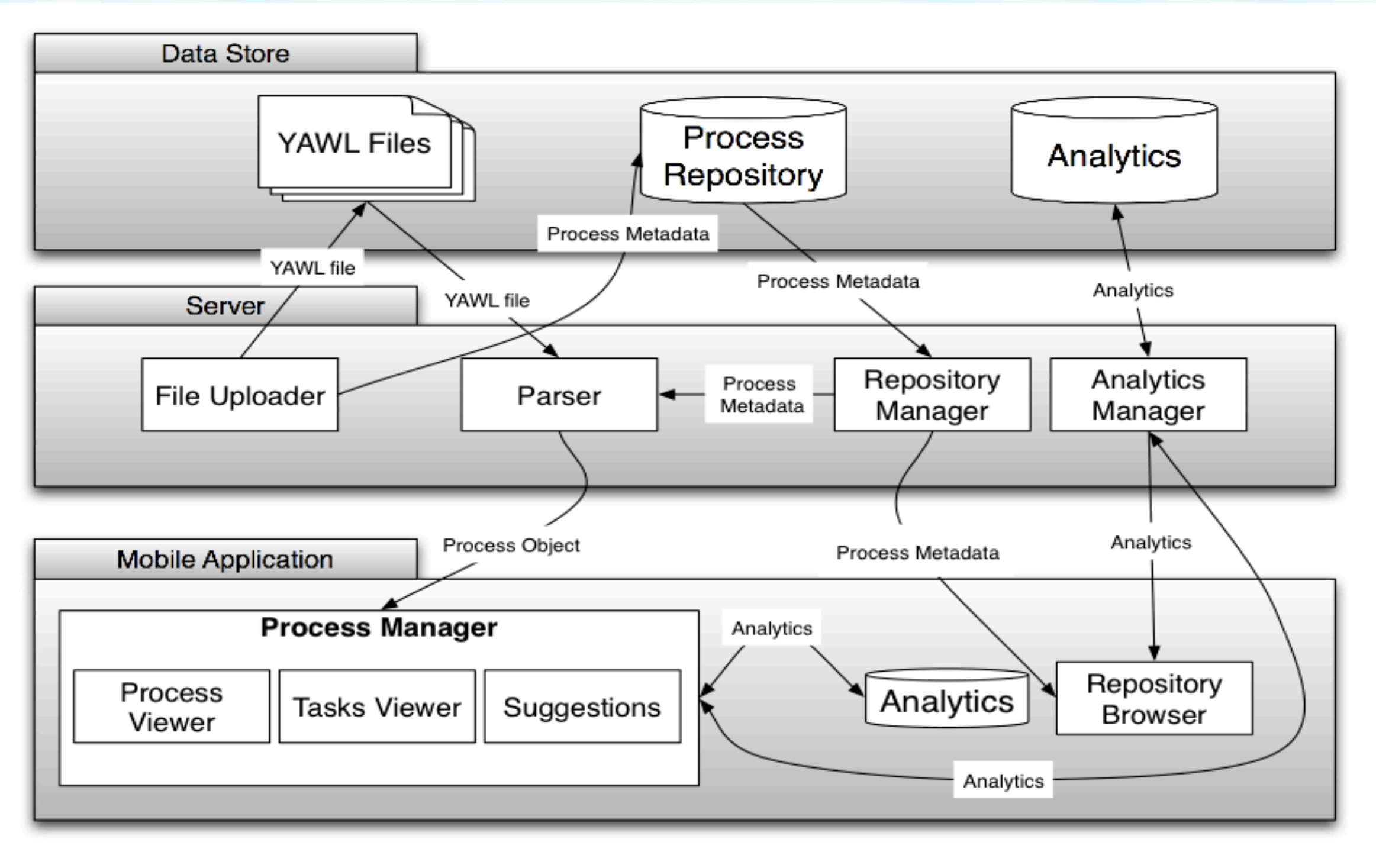
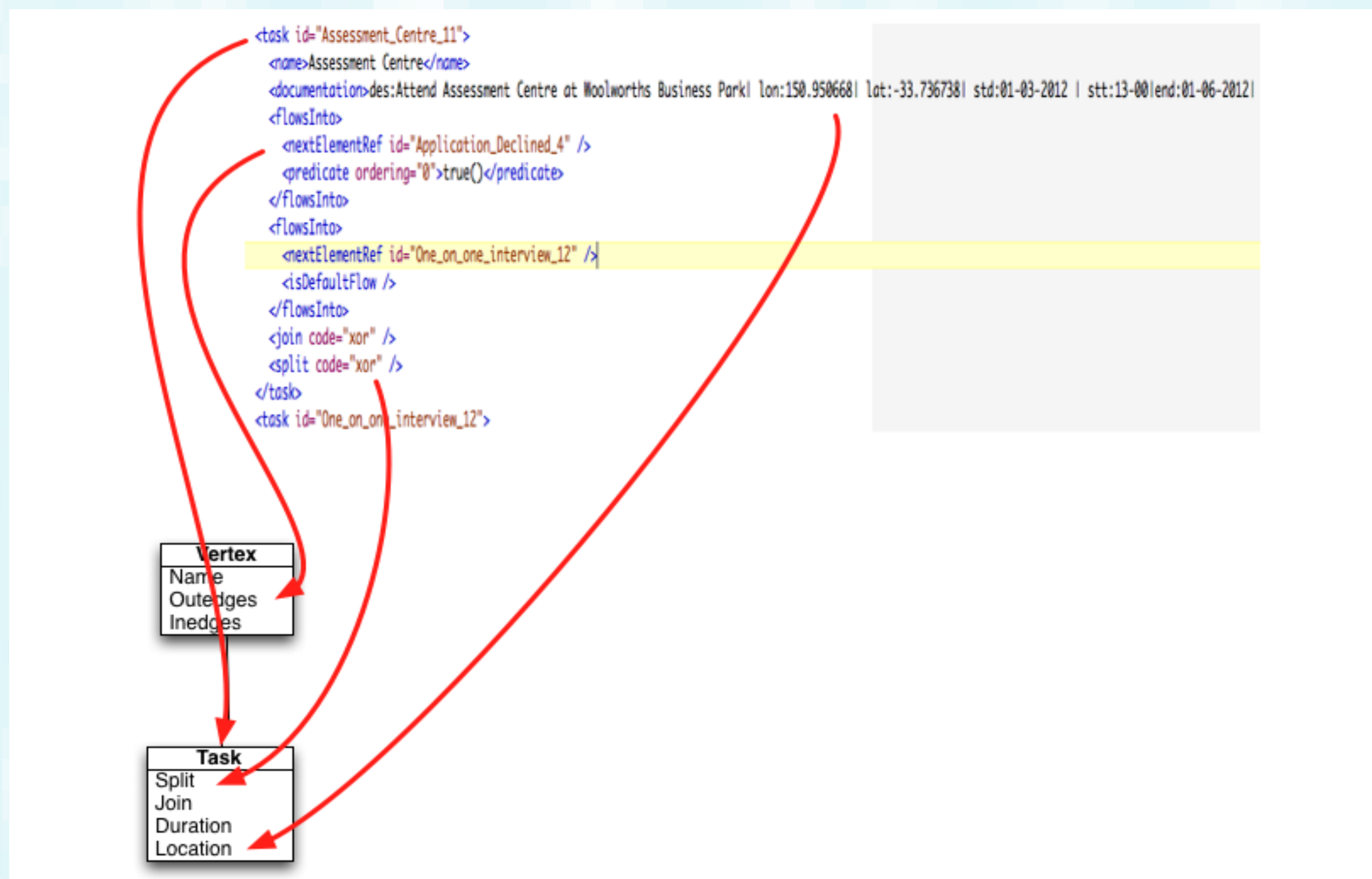
Business Process Modelling & YAWL

Business Process Modelling technology drives many of today's Business Process implementations. We can leverage this technology to produce personal processes as well, to help users manage their everyday activities.



Parsing YAWL into Graph structures

YAWL processes are converted to Personal Process Objects defined as Graph data structures. This is for better management of processes when creating a To Do list



Process Manager

Through Web services, XML conversion and multiple databases, a process manager application is derived from the graphs objects and presented on a mobile front end to assist users manage their processes effectively. Analytics are also collected while users interact with their processes and are automatically updated and aggregated to give other users better feedback of processes.

Centralised Process Repository

This contains a variety of personal processes that have been created by process designers. Users of the system are able to browse and download processes from the repository. Allowing users and process designers to create and share their processes saves other users the time spent on researching these processes in order to generate their own task-list. Re-usable knowledge gained from completing personal processes can now be shared seamlessly.

Context-based task suggestions

This component suggests the best possible tasks to complete from their current list of processes taking into account the context of the tasks and current context of the user. Context of a task contains the time period that the task is available in, the location and duration of the task. This is compared with the user's current time and location. This saves user's time spent on deciding on which tasks to complete as the application takes everything into account when deciding on the most efficient and best possible path to follow through the user's personal processes.

