

Approval Systems—Requirement Analysis

The goal of this assignment is practicing requirement analysis and making design decisions based on the requirements.

An important part of an automation system is the approval process. Users may submit a request and depending on the defined approval process for that request, the request is sent to an approver or approvers for review and making decision.

In this iteration, we'll add rudimentary functionality of process creation and management on top of the user management system. We want to extend the existing system to allow students to submit and track their academic requests. A decision is “draft” when it is not submitted. It is “returned” if an approver has sent it back to the requestor for additional information. It is “approved” if it has the signature of all the approvers. There can be other states for decision, e.g., “pending”. We leave it to you to decide on other potential states.

Each team should pick two PDF forms from <https://www.uh.edu/academics/forms/> to automate. The teams should pick relatively complex forms that hasn't been chosen by other teams (add your forms to the discussion thread on Canvas). If all forms are chosen, they should talk to the instructor for guidance.

The main requirements are as follows. Please note that some of them are intentionally vague to allow creativity and design tension.

- 1- Users can upload an image file as their signature to the system.
- 2- The system uses HTML components to take the necessary fields from the users except User's first name and last name, which are extracted from the user session, and date that is taken from system.
- 3- At each step of the approval process, the system will generate and store properly signed PDF files. (You can use LaTeX and Makefile to generate PDF files in the backend.)

To learn more about approval systems, please refer to

<https://docs.bmc.com/xwiki/bin/view/Service-Management/Innovation-Suite/AR-System/ars213/Enabling-services/Enabling-approvals-in-requests/Setting-up-the-approval-process/Approval-processes/>

Deliverables:

- A zip file containing:
 - o user-story.pdf (one user-story per page.),

- use-case-diagram.pdf,
 - contribution.pdf, a document signed by the team members that indicates how many hours they spent on this phase separately and collectively.
- Link to the corresponding Latex files for each form on the project repository.