**Design Challenge: Capstone Project Approval App**
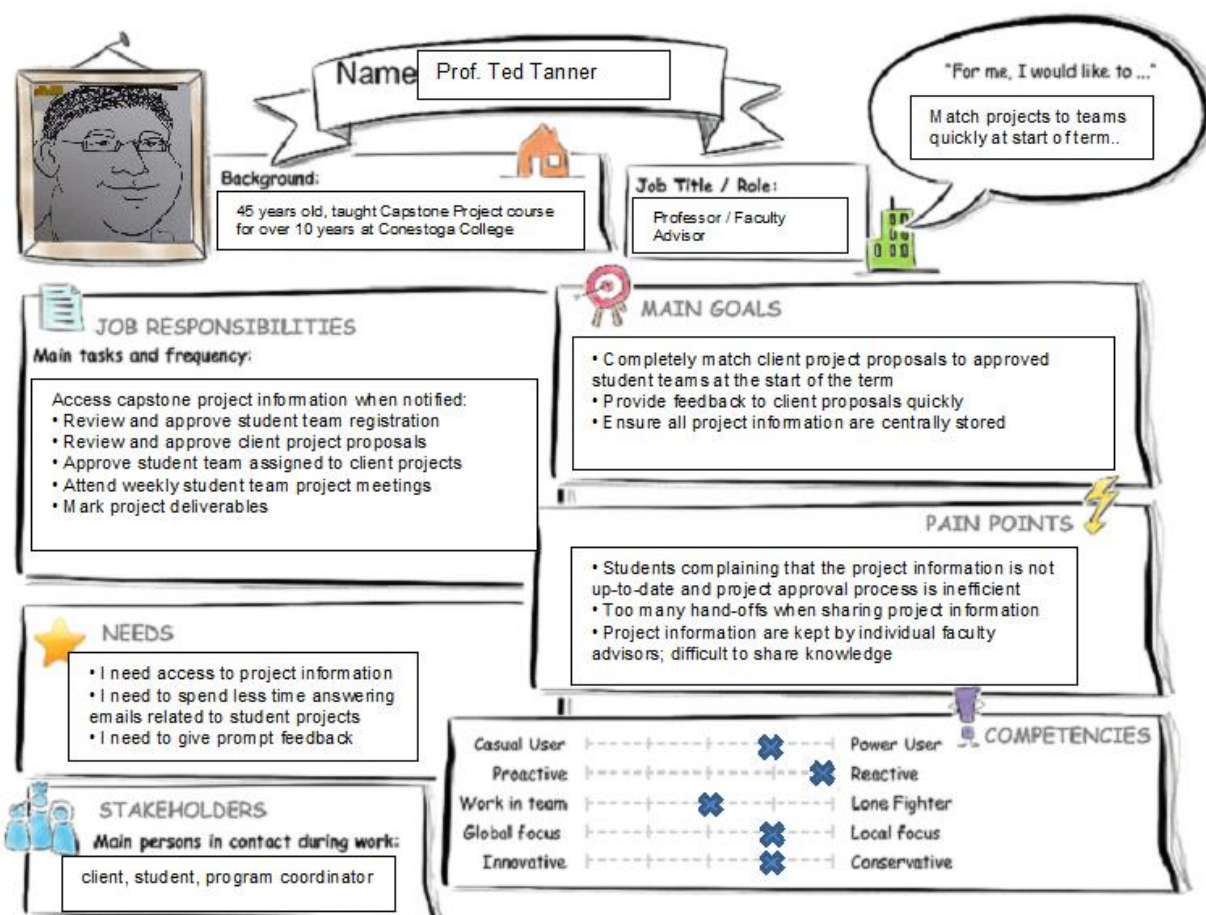
## 1. Story

Conestoga College is a community college located in Southwestern Ontario, Canada, granting applied degrees, two and three year diplomas and one year certificates in numerous programs. Students in the Information Technology (IT) cluster of programs must complete a **capstone project** prior to graduation that utilizes the skills the students have acquired over the course of their program. The IT cluster includes many programs such as the Computer Programmer (CP), Computer Programmer Analyst (CPA), and IT Innovation and Design (ITID).

*About two months before the start of each school term*, potential clients from the industry submits a project proposal to the IT chairperson or one of the IT faculty members. These proposals are manually consolidated by the **IT Program Coordinator** before the start of the school term. Potential clients have the option to present their proposal to the IT students during a **pitch night** event that is scheduled in November and March of each year. The IT students organize themselves into teams of 3. The student team can choose to work with any of the outstanding client proposals or they can find their own client projects. *At the start of a school term,* a **Faculty Advisor** (**FA**) is assigned to every approved student team. The student team submits their client project to the **FA** for review. Once the **FA** approves the scope and content of the client project, the student team begins to work on their **approved capstone project**.

The capstone project submission and approval process is done *manually*. To cope with the workload, the **IT Program Coordinator** gets help from other Faculty Advisors. Client proposals are reviewed and updated by a Faculty Advisor via emails. Approved client proposals are *manually* posted to a **Learning Management System** (**LMS**) for students to view. When a student team is formed, the Faculty Advisor manually updates the list of teams and uploads it to the **LMS**. When a client has chosen a student team to work with, the Faculty Advisor updates the list of **assigned projects** by *manually* copying the client, student and project information. The client proposal is moved from the "**Available**" to the "**Taken**" folder. There is no visibility for any submissions that are "**In Progress**". When there were only a handful of capstone projects to monitor and approve, the *manual process* was adequate. However, with over 120 students (i.e., over 40 capstone projects) enrolled in the **capstone project** course each term, the *manual process* is no longer effective. For example, students continue to contact the client without knowing that the proposal has already been assigned to another student team. Clients who receive emails from multiple student teams have to decide which team to work with. Without a full-time capstone project coordinator position, managing the *manual* submission and approval process is tedious and inefficient. This has led to some student disappointment and some client dissatisfaction. *The above issues became the motivation to realize a solution. Using the SAP Fiori design guidelines, we aim to resolve any inefficiencies and streamline the end-to-end* **capstone project approval** *process*.

## 2. Persona



**Name** Prof. Ted Tanner

"For me, I would like to ..."

Match projects to teams quickly at start of term..

**Background:**

45 years old, taught Capstone Project course for over 10 years at Conestoga College

**Job Title / Role:**

Professor / Faculty Advisor

### JOB RESPONSIBILITIES

**Main tasks and frequency:**

Access capstone project information when notified:
• Review and approve student team registration
• Review and approve client project proposals
• Approve student team assigned to client projects
• Attend weekly student team project meetings
• Mark project deliverables

### MAIN GOALS

• Completely match client project proposals to approved student teams at the start of the term
• Provide feedback to client proposals quickly
• Ensure all project information are centrally stored

### PAIN POINTS

• Students complaining that the project information is not up-to-date and project approval process is inefficient
• Too many hand-offs when sharing project information
• Project information are kept by individual faculty advisors; difficult to share knowledge

### NEEDS

• I need access to project information
• I need to spend less time answering emails related to student projects
• I need to give prompt feedback

### STAKEHOLDERS

**Main persons in contact during work:**

client, student, program coordinator

### COMPETENCIES

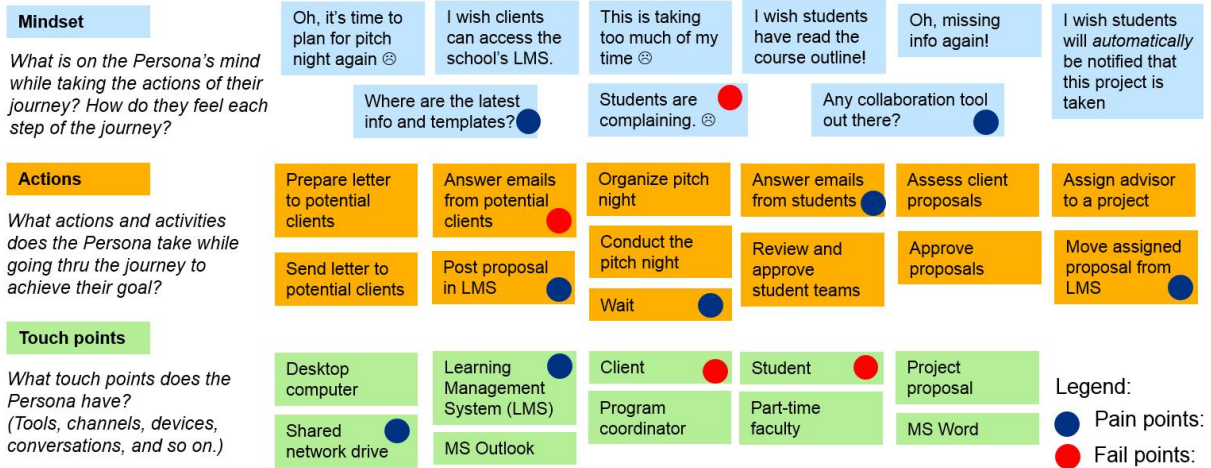| | | |
|---|---|---|
| Casual User | ✖✖ | Power User |
| Proactive | ✖ | Reactive |
| Work in team | ✖ | Lone Fighter |
| Global focus | ✖ | Local focus |
| Innovative | ✖ | Conservative |

## 3. Point of View

Ted, a Faculty Advisor for capstone projects, needs a way to quickly match and approve the client project proposals and student teams so that he can concentrate on his main job responsibilities as a teaching professor.

# 4. User Experience Journey (Design Thinking)

## Current User Experience Journey

## Duration of the Journey: 2 months

### Mindset

*What is on the Persona's mind while taking the actions of their journey? How do they feel each step of the journey?*

| | | | | | |
|---|---|---|---|---|---|
| Oh, it's time to plan for pitch night again ☹ | I wish clients can access the school's LMS. | This is taking too much of my time ☹ | I wish students have read the course outline! | Oh, missing info again! | I wish students will *automatically* be notified that this project is taken |
| Where are the latest info and templates? ● | | Students are complaining. ☹ ● | Any collaboration tool out there? ● | | |

### Actions

*What actions and activities does the Persona take while going thru the journey to achieve their goal?*

| | | | | | |
|---|---|---|---|---|---|
| Prepare letter to potential clients | Answer emails from potential clients ● | Organize pitch night | Answer emails from students ● | Assess client proposals | Assign advisor to a project |
| Send letter to potential clients | Post proposal in LMS | Conduct the pitch night | Review and approve student teams | Approve proposals | Move assigned proposal from LMS ● |
| | | Wait | | | |

### Touch points

*What touch points does the Persona have? (Tools, channels, devices, conversations, and so on.)*

| | | | | | |
|---|---|---|---|---|---|
| Desktop computer | Learning Management System (LMS) ● | Client ● | Student ● | Project proposal | **Legend:** |
| Shared network drive ● | MS Outlook | Program coordinator | Part-time faculty | MS Word | ● Pain points: |
| | | | | | ● Fail points: |

*Note: The Learning Management System (LMS) is only accessible within the college community. Clients do not have access to the LMS.*

# 5. Mock-ups

Fiori Launchpad:

*Annotations showing the step numbers from (1) to (8) are displayed on the lower left corner of each Fiori app to depict a typical business process flow.*
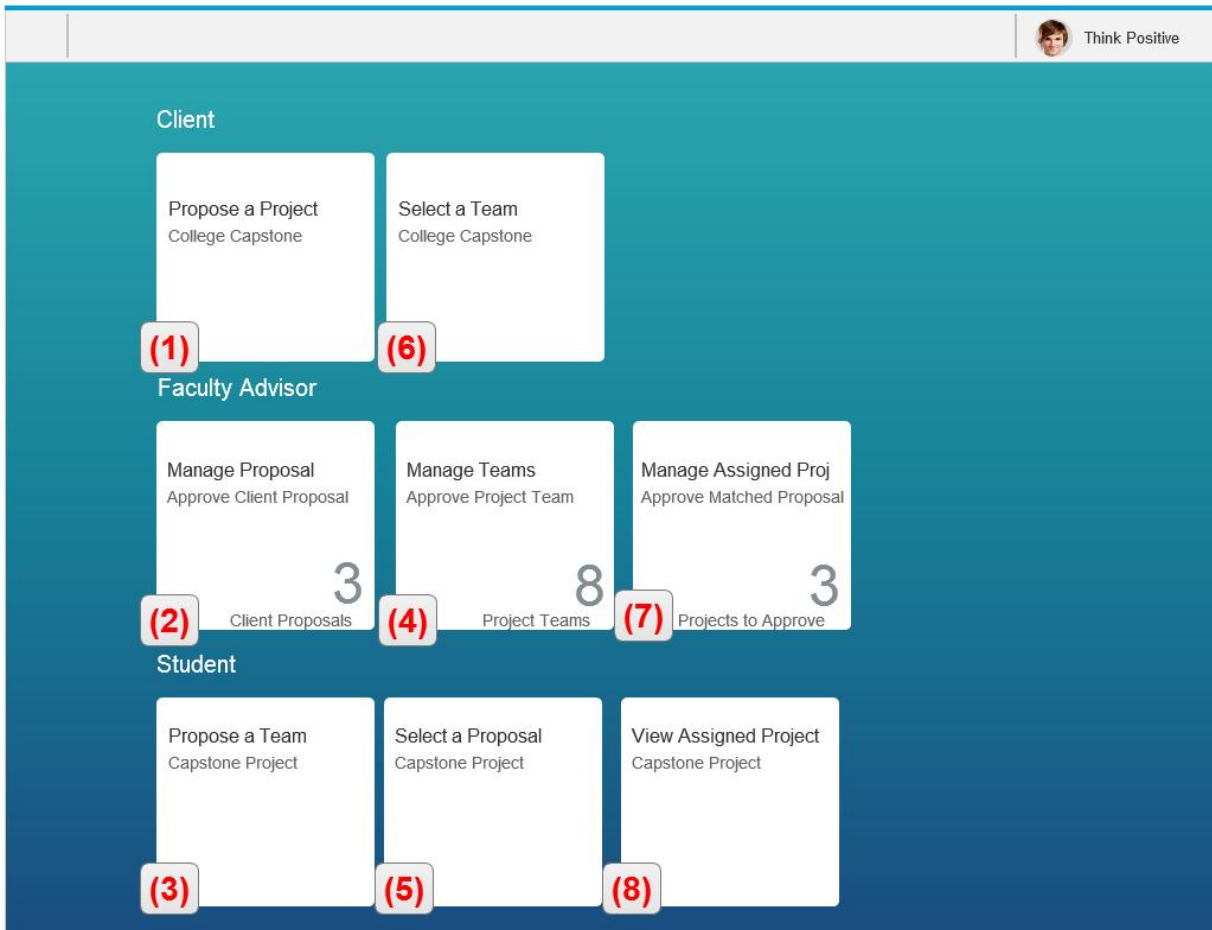
Mock-ups are available for steps (1) and (2) only. The other apps will follow the same Fiori design.

(1) Propose a Project (Client can add, edit or delete a project proposal)



Note: Only the Info tab ⓘ is available in this mock-up. The mock-ups for the Notes 🗒 and Attachments (Upload) 📎 tabs are not available.

## (2) Manage a Proposal

### (2a): Info tab (Faculty Advisor can view project Info provided by the Client)



### (2b) Notes tab (Faculty Advisor can edit the notes, as needed)

**(2c) Approve tab** (Faculty Advisor can Accept or Reject a client proposal)
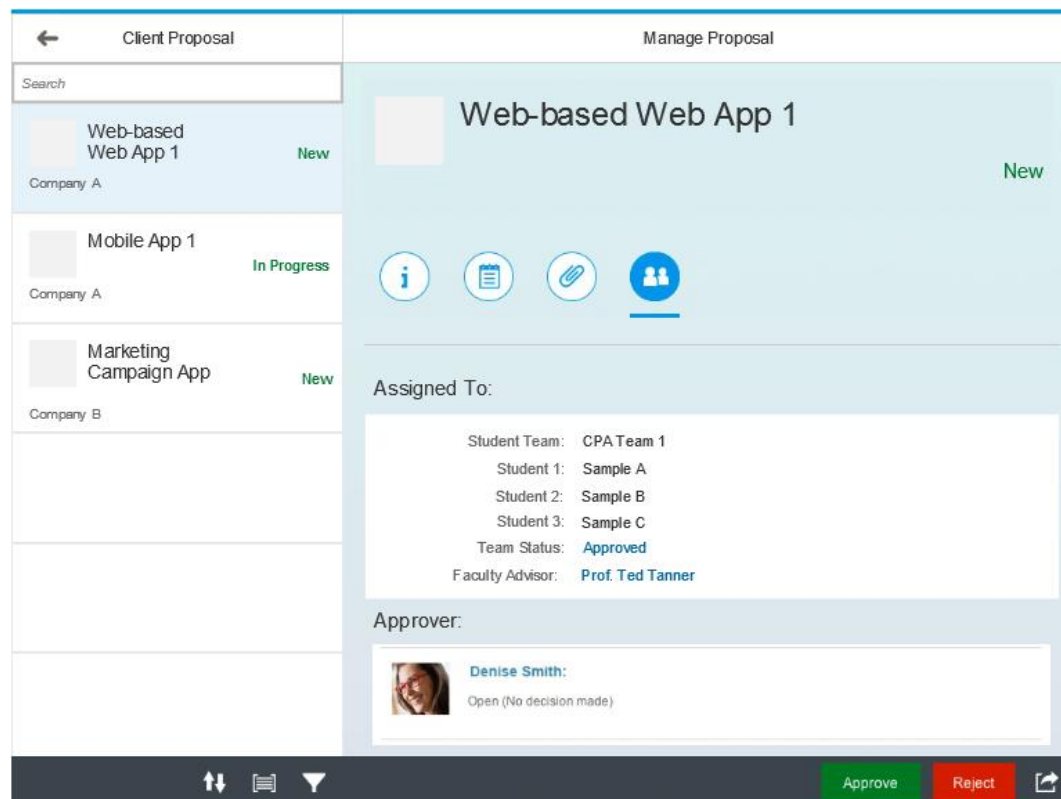


Prototype Preview Link:

https://standard.experiencesplash.com:443/api/projects/2da7feb8ffa589410bac626b/prototype/snapshot/latest/index.html#/1458147185961_S0

# 6. Study

Study Link:
https://standard.experiencesplash.com/home/projects/2da7feb8ffa589410bac626b/research/participant/c12ae95488db27b00bae1952

| Study Name | Capstone Project Approval Study |
|---|---|
| Description | This study is intended to get direct feedback for navigation flow of the Capstone Project Approval App prototype. |
| Task 1 | You are a Faculty Advisor who want to review and approve a client proposal (e.g., Web-based Web App 1 project). Please navigate to the Manage Proposal (Approve Client Proposal) app and navigate to the Approval tab. Find the Approve and Reject buttons. |