

# Visual Course Planner

*Final Report*

*Version 1.0*

*03.17.2019*

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# 1 PROJECT MANAGEMENT ACTIVITIES

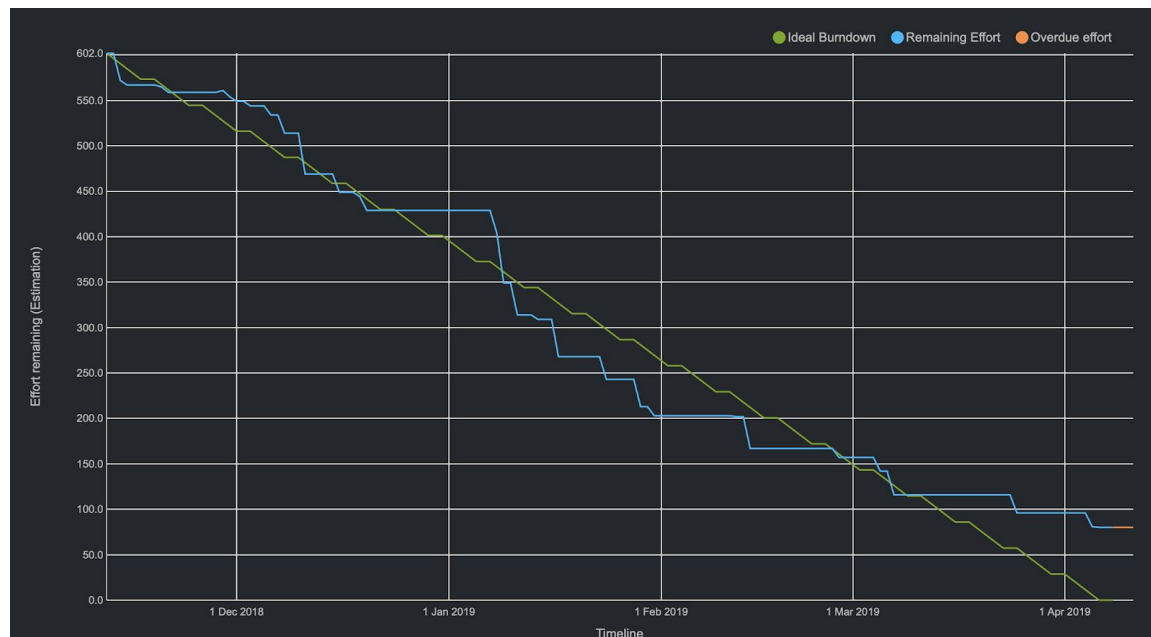
## 1.1 TOGGLE TIME

The Total amount of Toggled time for each member spent developing The Visual Course Planner from September 6, 2018 to April 14, 2019

Team Member	Total Hours Spent/Member
Mackenzie Salloum	287
Taylor Siemens	249
Herraj Luhano	184
Jaskaran Lidher	143
Noman Mohammad	156
<b>Project Hours</b>	<b>1018</b>

## 1.2 BURNDOWN CHART

The following image is the Burndown chart for The Visual Course Planner from September 6, 2018 to April 1, 2019.



## 2 SOFTWARE IMPLEMENTATION

### 2.1 UPDATED TEST REPORT

The following is an updated version of our test report

	Type of Test	Contributor	Pass/Fail
1 Requirements			
2 Functional Requirements			
3 The system will periodically save the current plan a user is editing.	Unit	Mackenzie	P
4 The system will display a warning summary including credits required	Unit	Mackenzie	P
5 The system will use a drag and drop organization of courses that immediately updates the degree plan.	Manual	Herraj	P
6 The system will store course information in a database.	Manual	Mackenzie	P
7 Each account will be associated with up to 10 degree plans.	Manual	Mackenzie	P
8 Each student is prompted to select a program upon creation of new degree plan.	Manual	Taylor	P
9 A default degree plan is displayed in the Visual Course Planner based on the chosen degree .	Manual	Mackenzie	F
10 A warning is triggered if prerequisites are needed.	Unit	Mackenzie	P
11 Drag and drop functionality for the reorganization of courses based on the students preferences.	Manual	Herraj	P
12 System will support the creation of user accounts.	Manual	Noman	P
13 The system will be able to hide semesters of the users choosing	Manual	Mackenzie	F
14 System will inform students to view their Visual Course Planner on major web browsers	Manual	Mackenzie	F
15 On a mobile device the Visual Course Planner cannot be edited or changed in any manner.	Manual	Mackenzie	P
16 Non-functional Requirements			
17 Changes students makes to their plans will be automatically saved.	Unit	Mackenzie	P
18 Degree information is able to be uploaded by an administrator.	Manual	Mackenzie	P
19 Warnings are to be displayed immediately once a change has been made that affects the degree plan by prolonging the graduation date, and missing prerequisites..	Unit	Mackenzie	F
20 The Visual Course Planner will be accessible through mobile devices	Manual	Mackenzie	P
21 User Requirements			
22 Users will be able to input their email, name, and a password of their choosing to create an account.	Manual	Taylor	P
23 Users will be able to save up to 10 degree plans	Manual	Mackenzie	P
24 Users will be able to drag and drop courses to make their degree plan	Manual	Herraj	P
25 Administrators can upload current course and program information	Manual	Mackenzie	P
26 Users can favourite course plans, making them clearly visible.	Manual	Mackenzie	P
27 Users can add a text description to each of their saved course plans	Manual	Mackenzie	P
28 Users are warned of any prerequisite conflicts or missing credits	Unit	Mackenzie	P
29 Users will be required to verify their account through a link sent to their email	Manual	Noman	P
30 Users are able to create an account	Manual	Noman	P
31 Users can save a text description with every course plan.	Manual	Mackenzie	P

### 2.2 CORE REQUIREMENTS DELIVERED

The following features are core requirements that make The Visual Course Planner.

#### 2.2.1 ADMIN AND STUDENTS

The Visual Course Planner has a total of two different type of users: Admins and Students. Admins are able to upload courses and specializations into The VCP. What courses and degrees are presented through The Visual Course Planner is entirely dependant on what is uploaded through the Admin Portal. Students are the main user for The VCP where they can create multiple degree plans in correspondence with The University of British Columbia Okanagan Campus' Academic Calendar.

#### 2.2.2 DRAG AND DROP FUNCTIONALITY

The drag and drop functionality is only accessible at The Visual Course Planner's main interface. This allows students to easily rearrange courses on the student's current degree plan.

#### 2.2.3 DEGREE PLANS

Every student account can have a maximum of 10 different degree plans. For easy access, they can also favourite the current degree plan by clicking the "heart" icon at the top of the screen. The ability to also write down notes for each degree plan is also available.

### 2.2.4 PROFILE

The Profile Interface is where students can update their credentials such as their first name, last name, password, or course history.

### 2.2.5 ADMIN PORTAL

The Admin Portal allows Admins to upload current offered courses and specializations into The Visual Course Planner

### 2.2.6 WARNING SUMMARY

Warnings are displayed depending on course dependencies. Once all dependencies have been satisfied, their warnings are removed.

### 2.2.7 EMAIL VERIFICATION

Once a new account has been created, the new user is required to verify their email address with the provided confirmation link.

## 2.3 KNOWN BUGS

The following are current bugs that are featured throughout The Visual Course Planner.

- Course duplicates are not rejected in the same term
- For arrows to show & work properly, the app has to be refreshed after adding the first two courses
- When a connected course is deleted, the arrow stretches and follows the deleted course back to the course list sidebar, on the right of the screen.
- Course history is not connected to the backend. Needs API route and connection to the database
- Other unknown bugs

## 2.4 KEY LESSONS

- Collaboration: Throughout the 8 months of planning and development, each and everyone of the team members have learnt to work together and realized that we must prioritize team growth and development in order for our project to succeed.
- Planning: We have learnt that in order to truly have an upwards trend for project development, proper planning and project management must be taken in place. These ideas were integrated through the uses of the initial design documents and tasks were picked up and finished with use of youtrack.
- Communication: It was quickly noted that team communication is a key aspect for any collaborative project.

## 3 UNIMPLEMENTED FEATURES

The following are features that were not implemented before April 17, 2019.

### 3.1 OPTIMIZE BUTTON

The optimize button is designed to optimize the duration of the student's degree plan based several user-provided parameters.

### 3.2 GO GLOBAL AND CO-OP COURSES

The ability to add Go Global and Co-op courses offered at the University of British Columbia Okanagan Campus to the degree planner.

### 3.3 INTEGRATION OF DATA SCRAPER

Currently running the data scraper is manual process. The scraper retrieves course data from the UBC Okanagan academic calendar and formats it. This data needs to be imported into the system.

### 3.4 DEFAULT DEGREE PLAN

A default degree plan is displayed in the Visual Course Planner based on the chosen degree when a new Degree Plan is created.

### 3.5 COURSE INFORMATION

A menu that appears when user clicks on a course module in the visualization tool. This menu displays additional course information such as course description, credits & a link to the course page on SSC

### 3.6 COLLAPSABLE SEMESTERS

The system will be able to hide semesters of the users choosing.

### 3.7 INCOMPATIBLE BROWSER ALERT

System will inform students to view their Visual Course Planner on major web browsers

### 3.8 DEGREE PLAN LIMIT

Every student account can have a max of 10 degree plans. If the student tries to create more than 10, they are prompt to delete a plan before another one can be created.

## 4 PARTIALLY IMPLEMENTED FEATURES

The following are features that have been partially implemented with The Visual Course Planner but still required more work.

### DEPENDENCIES ARROWS

The arrows need polishing and finesse. The arrows also have unreliable rendering as mentioned in the bugs.

### COURSE HISTORY

The UI is implemented for Course History component but the functionality is not there. An API route needs to be implemented for this component.