

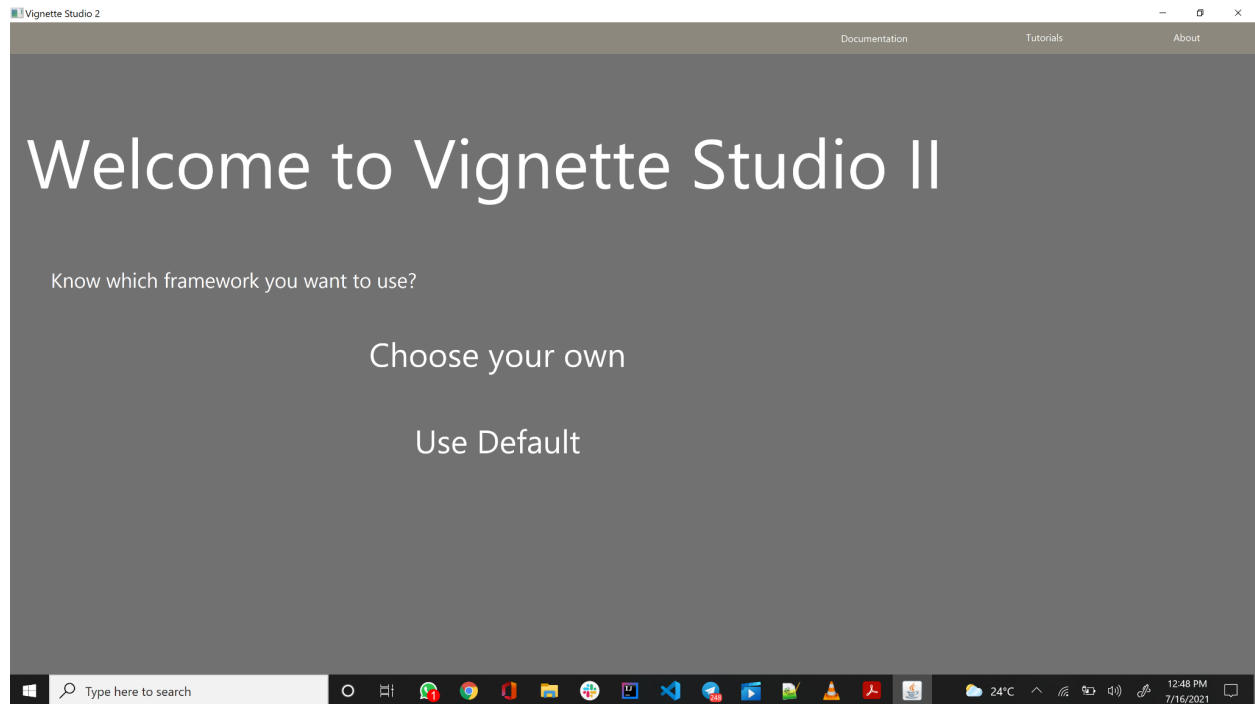
**VIGNETTE STUDIO-II DOCUMENTATION
THE INTERACTIVE VIDEO VIGNETTES PROJECT**

INTRODUCTION

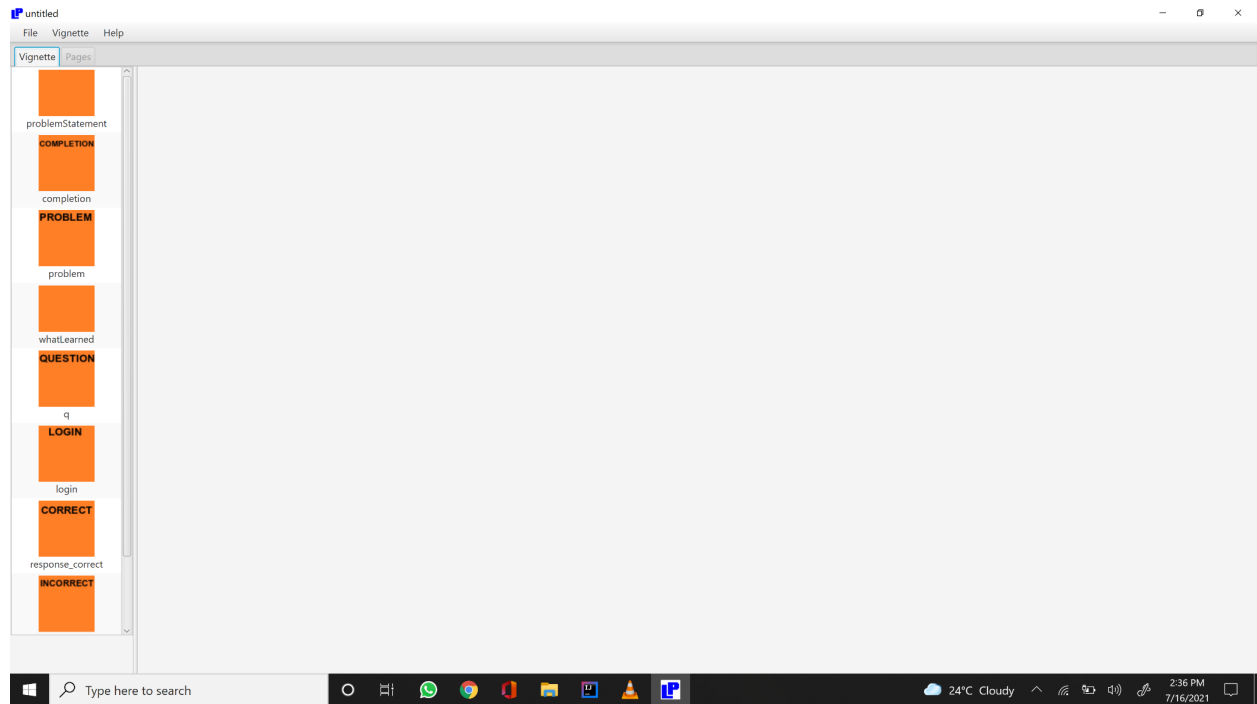
Interactive Video Vignettes are web-based Assignments for introductory Physics students. They combine the convenience of online video and the interactivity of individual tutorials enabling students to understand and work on a problem hands on. Each online vignette addresses a known learning difficulty. A typical vignette takes about 10 minutes or less to complete. It invites each student to make predictions, perform observations, and draw conclusions about a single phenomenon or revisit the video tutorials to understand them better. The design of vignettes is informed by the outcomes of physics education research and is being refined through a research-based development process. The possible uses of vignettes include:

- Online assignments similar to ungraded homework that carry completion credit (This enables students to make authentic predictions without feeling they are being judged.)
 - Examination preparation
 - A tutorial setting where students work in collaborative groups
 - A flipped classroom assignment where a vignette is completed before its topic is introduced in class
 - An online textbook enhancement.

Using Vignette Studio-II to design and develop your Vignettes



A designer can use a framework built by themselves or by a group of designers to adhere to particular design principles and techniques given by the universities. (See design your framework section to know everything about frameworks.) Or they can use the default framework designed by the designer at the project that adheres to the User Interface and User Experience guidelines to give the students an easy to navigate experience. This can be done by clicking on the Use Default button in the frameworks screen. This will take you to the main screen of the Vignette Studio. (1) On the top of the VS-II is the menu bar which has the File Menu, Vignette Menu and the Help Menu. (2) Below that is the Tab Menu Bar which can be used to switch between the vignette screen and the text editor. (3) The left corner is the pane tab that lists all the pages with icons within the selected framework. The icons can be dragged on to the Right Pane (4) to add a page to the Vignette. The description of the page can be found on the **Framework Pages** section.



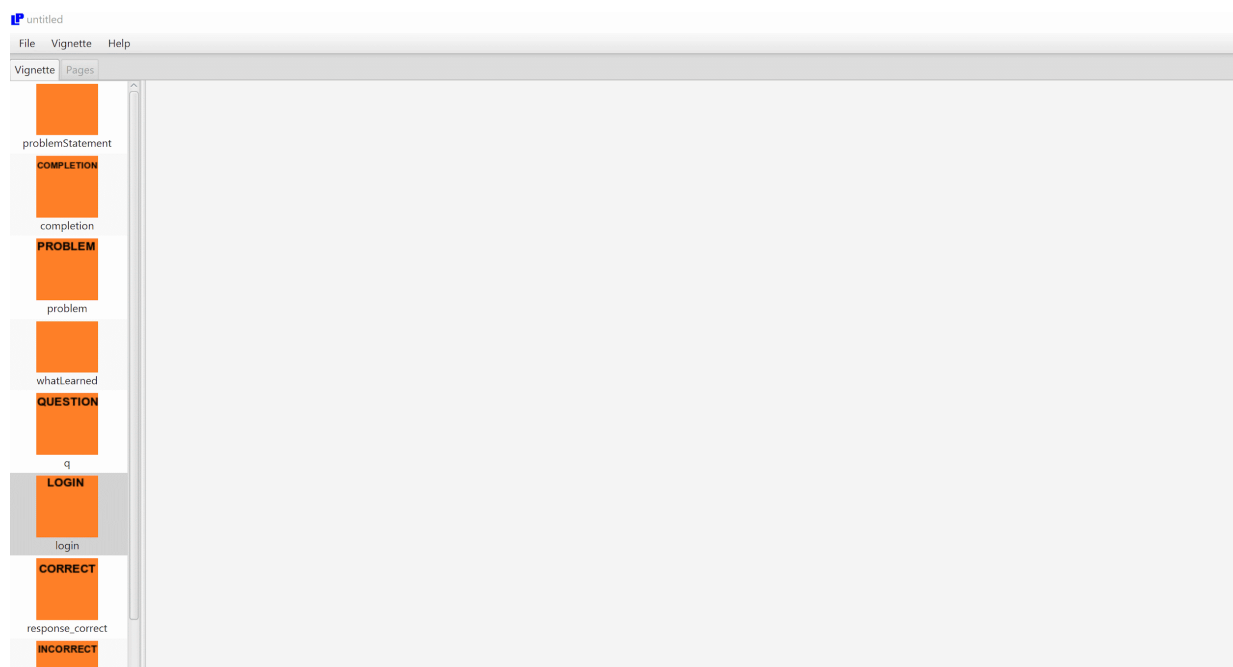
Creating your Vignette

The Vignette Studio considers the Login page as the First Page by default.

Step 1: Drag the page icon from the Left Pane on the canvas.

Step 2: The page setup pops up for any page.

Step 3: Enter the name you desire to give the page in the vignette.



This creates a Page in the Vignette. The content and the settings of the Page can be changed by double clicking on the Page Icon on the canvas.

Step 4: Double click on the Icon to open the Pages tab. This will open the Page settings screen.

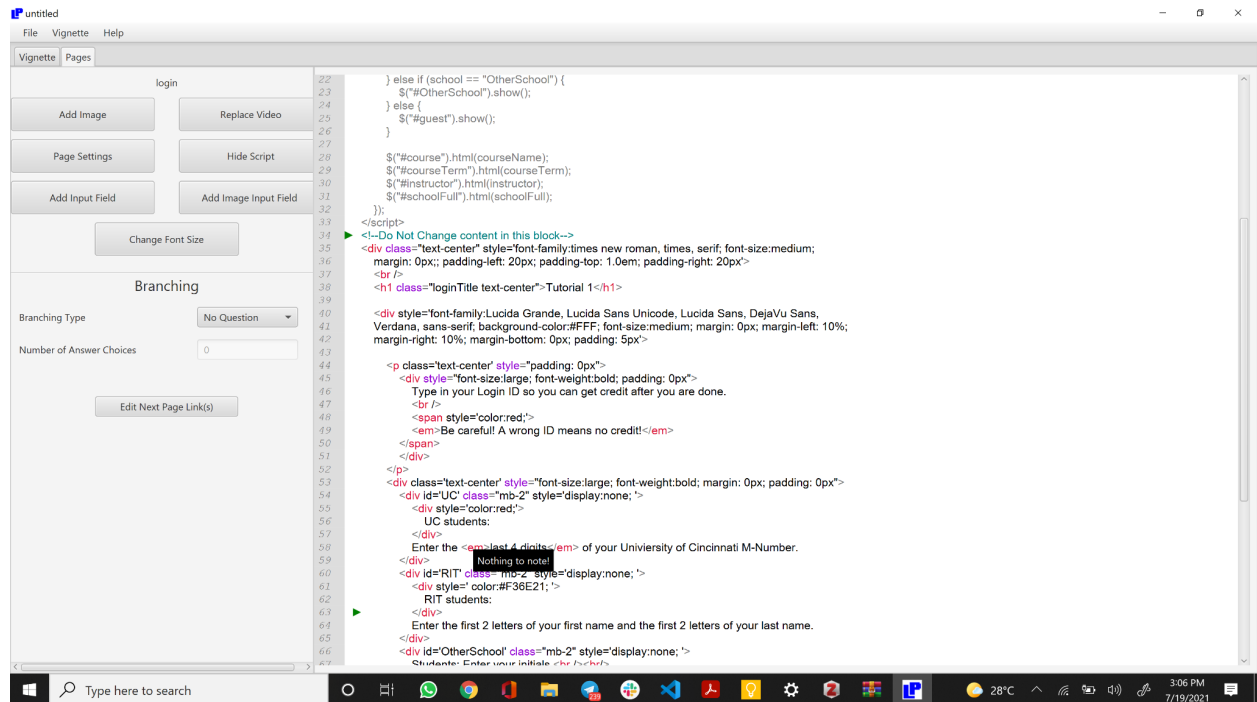
*******Screenshot of the Pages screen*******

The buttons on the left menu tab perform various functions like adding a video, question, images and toggling between the button settings. The Right side of the screen hosts a Text Editor that can be used by people with knowledge of HTML and CSS to customize the Vignettes.

Text Editor Area

The text editor reads the content of the HTML file from the selected framework. The content within the <script> contains the Javascript content necessary for the smooth functioning of the vignettes. It is highly recommended not to change this content as this portion of the code is responsible for functionality of Vignettes like routing, loading and playing video and other page specific functions. This font color of this segment is grey in color to remind the user of the above recommendation.

The styling within the VS-II is handled by inline styling to reduce the complexity of the code displayed to the user. The elements added by the buttons on the left pane are appended into the <div> section of the code.



On the left pane the buttons provide following functionality -

1. Replace Video Button - This option can be used to upload a tutorial video within the Vignette page. The video can either be uploaded on Vimeo.com or Youtube.com. The selection of Vimeo or Youtube options can be done from the dropdown within the Replace Video Popup. The designer will have to add the link to the Vimeo's uploaded video or the link or video id for the Youtube option.

*****Screenshot of Replace Video Popup*****

<https://www.youtube.com/watch?v=9Ga9dP3bvN8>

The highlighted portion in the above youtube link is the id of the video.

2. Add Image Button - This option can be used to upload an image as an explanation to the video. The user can toggle between the video and the image using the Option button within the vignette.

*****Screenshot of Add Image Popup*****

The designer can click on the "Click to add image" to upload an image from the file system. Once uploaded a preview of the image is shown on the screen. You can set the width and a class within the popup and the settings will be applied to the image tag in the Vignette.

3. Page Settings - This option gives the designer the flexibility to enable or disable the buttons on the bottom of the Vignettes. By default disabled buttons have an opacity of 10% and enabled buttons have an opacity of 100%. The user can

customise the opacity of any enabled button. The set settings can be viewed on the popup itself to provide a better understanding to the designer.

4. Hide Script/ Show Script- This option can be used by the designer to toggle between viewing and not viewing the contents of the <script> that hold the javascript code. This code is responsible for functions like routing, loading video on the page and the button settings.
5. Add Input Field - This option is used to add question pages within the Vignette. A designer can add any number of questions from three categories: Radio Button (Multiple Choice), Checkbox (Multiple Correct Answers) or a Textbox Answer. A page can not have more than one routing question. Textbox type questions cannot be a routing question.

A question page without a routing questions route to the default next page. Otherwise, the next page depends upon the answer selected by the user.

*****Screenshot of Add Input Popup*****

6. Add Image Input Field -The option can be used to add radio or checkbox type questions which have Images as their options. The branching options remain the same.
7. Change Font Size - This option let's user change the size of the font in the Text Editor area.

Explain Branching Part

Menu Bar Options

File Menu -

New Vignette - This option is used to create a new Vignette.

Open - Any existing vignette can be opened in the Vignette Studio using the Open Option in the File Menu. The file type that VS-II supports is .vgn.

Open in Explorer - This option opens the folder containing the current Vignette the designer is working on.

Save - Save helps to update the lastly preserved file with the latest content created in Vignette Studio in the form of a .vgs file.

Save As - Save As helps to store a new file or to store an existing file to a new location with the same name or a different name. The file format is .vgs.

Recently Opened Vignettes - This shows all the recent .vgs files that were accessed on Vignette Studio are listed here.

Preferences - This option allows users to select the number of Recent Files they want to be listed in the File Menu. An option to clear the list of all the recent files is available within the popup.

Exit - This option can be used to close the Vignette Studio - II.

Vignette Menu -

Rename Vignette - This option is used to rename the Vignette the user is currently working on.

Settings - The settings option lets the designer set the details of the Vignette like the course Id, course Title, Instructor, Course Term, School Name etc which is displayed across the Vignettes.

Style Editor - This option is used to make changes to the styling of the Text Editor. This has options to change the theme, font family, font color etc.

Preview Vignette - A designer can use this option to create a preview of the Vignette they are building. The vignette is viewed on a web browser by creating a temporary localhost.

Stop Vignette - This option can be used to disable the localhost running and previewing the current vignette on a web browser. It is only enabled when the above preview Vignette option is running.

Help -

Tutorial - This option stores the documentation of the Vignette Studio - II. Designers can view this to understand the working of the software.

About - This option views the details of the Vignette Studio - II software and its policies.

BRANCHING

1. **Non question pages** - Branching on a page without any questions is set to navigate from one page to another. There is only a default value of the branching variables.
2. **Question page with non branching question** - A page with a non branching question acts similar to a non question page in terms of branching and the user is directed to the default page regardless of what the answer is given.
3. **Question page with branching question** - The different options for branching can be directed to different pages depending upon if they were correct or incorrect. Each page can only have one branching question. Branching question can be of the type multiple choice single correct or multiple choice multiple correct only. They cannot be of the text type.

REQUIRED

Each question can either be required or not. A required question must be answered before the user can go to the next page. Every branching question is automatically set to required. If a required question is not answered a tooltip appears above the next page button and the button is disabled. The designer can set the question to be required by selecting the isRequired input on the questions popup screen while adding each question.

REDISPLAYING RESPONSES TO QUESTIONS

The responses to a question are redisplayed when the user revisits a page. This helps the user to revisit and reassess their responses. The Vignettes uses the Local Storage of the User's Browser to store this information and is deleted when the vignette is closed. Redisplaying the answers for any other inputs on a page can be implemented by following the below structure within the page with input tag.

```
<div id="question_page">
....
  <div class="questions">
    <form id="ques1">
```

```
<div id="question_text"> The text of the question goes here </div>
## For radio or checkbox type
<input id= "ques1oA" value="A">
<input id= "ques1oB" value="B">
</form>

<form id="ques2">
<div id="question_text"> The text of the question goes here </div>
## For radio or checkbox type
<input id= "ques2oA" value="A">
<input id= "ques2oB" value="B">
</form>
</div>
</div>
```

PAGES DESCRIPTION

1. Login Page

The login page is by default the first page in a Vignette. It lists all the details about the vignette like the Course Name, Title of the Vignette, Instructor, School Name and the Course Term. The student enters a Login Name in order to go to the next page. The validation of the Login Id depends on the name of the University hosting the Vignette. The Login Id of the student is used to create the certificate for when the user finished the Vignette.

2. Problem Statement

Problem Statement is a concise description of the issue being addressed within the Vignette. This can be viewed by the students on all the pages. It is opened using the Problem Statement Button in the bottom middle of the Vignettes. The page pops up in the form of a modal above the current page instead of routing to a new page. Designers can choose to disable the Problem Statement button on the pages by changing the Page Setting in the Pages tab. The problem statement only holds the textual or a graphical representation of the problem.

3. Problem

The problem page hosts either an image or a video with text explaining the problem in a detailed manner.

4. Questions

A questions page as the name suggests is used to create a page that holds questions within a Vignette. A designer can add any number of questions on a page. The question can be of type Multiple choice single correct (Radio button type), Multiple choice multiple correct (Checkbox type) or short answer (Text type). A text type question cannot be a branching question hence the branching occurs either based on other branching questions or on the default option within the branching.

The designer also has the power to have a question compulsory or required. This would mean the user cannot navigate forward in the Vignette without answering the question.

5. General

This page contains a video and a text content displaying a message or a portion of content to the user.

6. General_Question

This page is a combination of the general and the question page. This page can hold one question generally of text type. This page can be used by the designer to ask the user to make a note of a plan they will follow for the tutorial or to cover a short answer type question.

7. Response_Correct

This page is navigated to when a user answers a branching question correctly. This page contains a message for the correct answer and a video and text explaining the solution of the question asked.

8. Response_Incorrect

This page is navigated when the user gives an incorrect response to the question asked. This page generally contains an explanation on why the selected response was incorrect and the user is

9. Completion

10. What Learned

1. Web End created by the Vignette Studio-II

2.1 Pages Description

2.2 Making your own framework

2.3 Redesigning your vignette

2.4 Page Interactions

2.5 Other features your Vignettes come built in with

2.6 Vimeo or Youtube Videos (How to choose)

2.7 Custom CSS

2.8 Options Tab

2.9 Problem Statement Modal

2.10

Framework Constraints

Comments within the HTML Code

2. Instructor Portal