

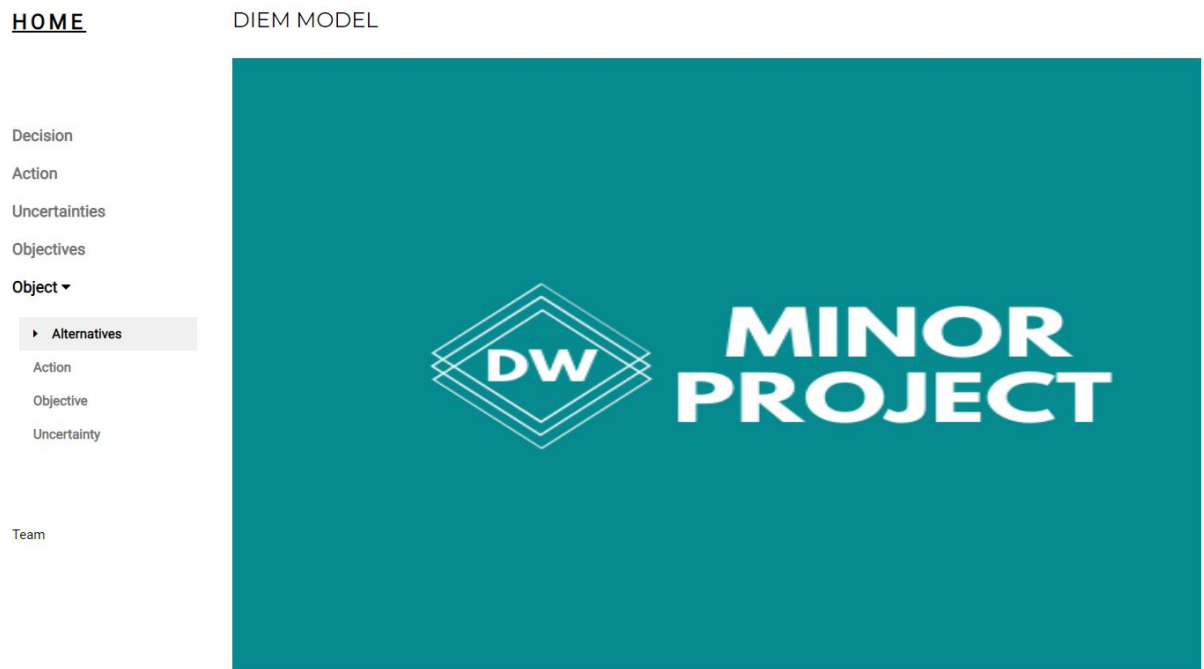
# DW Minor Project Report

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**Project Title:** What educational institute will you select to do your B.Tech.

## 1. Home page

The home page consists of all the nodes corresponding to a DIEM model.



## 2. Decision Page: In this page user has to make a decision

The screenshot shows the 'Decision' page. It has a light blue background. At the top, the word 'Decision' is centered in a large, dark font. Below it, the text 'Enter the decision you want to make' is centered. Underneath this text is a text input field containing the text 'Which institute for Btech'. Below the input field is a teal button with the word 'Save' in white text.

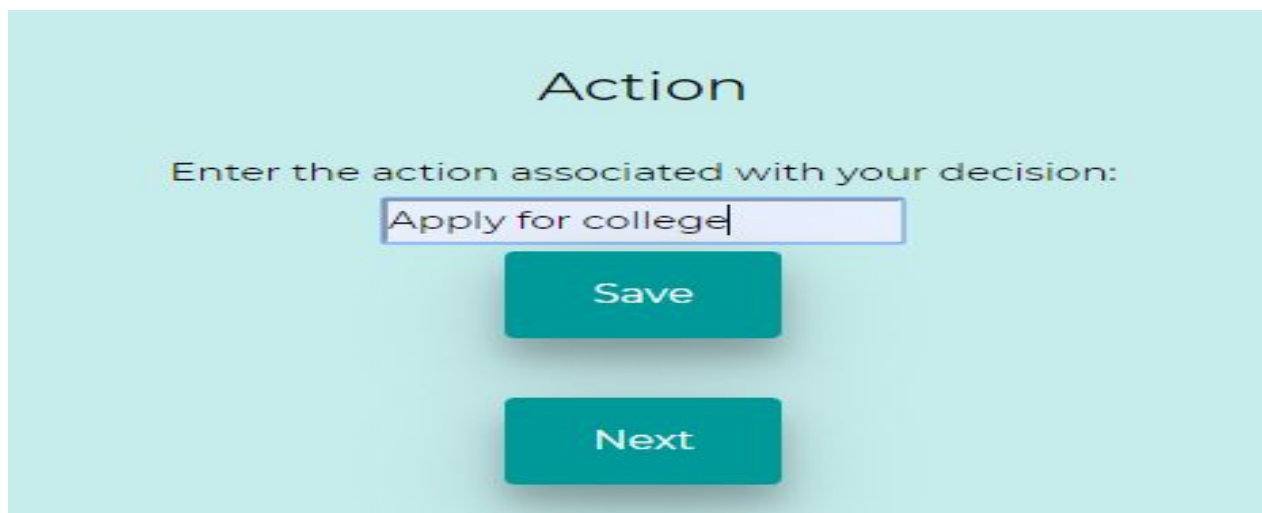
A table named decision is created with two fields id and decision name respectively.



The screenshot shows a table with two columns: 'id' and 'name'. There is one row with the value '29' in the 'id' column and 'Which institute for Btech' in the 'name' column. Above the table is a header bar with '+ Options' and a search icon. Below the table is a footer bar with a 'Check all' checkbox, a 'With selected:' label, and 'Edit', 'Copy', and 'Delete' buttons.

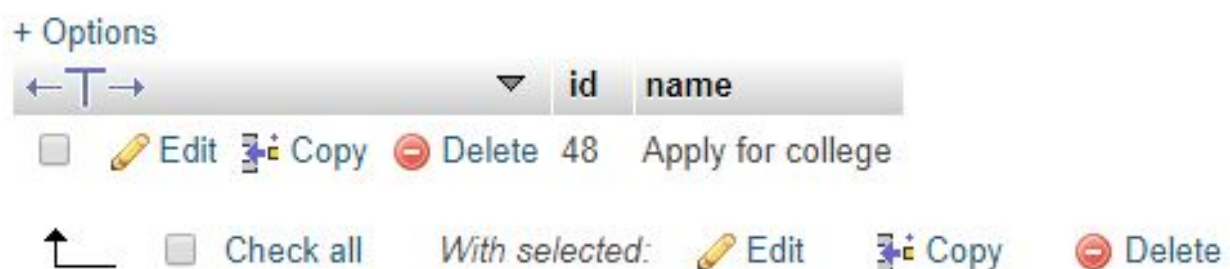
	id	name
<input type="checkbox"/>	29	Which institute for Btech

**2. Action page:** In this page, the user enters the action corresponding to the decision. In our project the action is “apply for college”.



The screenshot shows a light blue background with the title 'Action' at the top. Below the title is the text 'Enter the action associated with your decision:'. There is a text input field containing 'Apply for college'. Below the input field are two teal buttons: 'Save' and 'Next'.

A table has been created for action which contains action id and action name.



The screenshot shows a table with two columns: 'id' and 'name'. There is one row with the value '48' in the 'id' column and 'Apply for college' in the 'name' column. Above the table is a header bar with '+ Options' and a search icon. Below the table is a footer bar with a 'Check all' checkbox, a 'With selected:' label, and 'Edit', 'Copy', and 'Delete' buttons.

	id	name
<input type="checkbox"/>	48	Apply for college

3. **Action Attribute page:** After clicking on the next button in the action page, the user enters the **action attribute** page where the user enters all the attributes corresponding to the action.

### Action Attribute

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the attribute corresponding to action

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Enter the attribute corresponding to action

A table named `institute_attribute` is created which contains alternative names and all the attributes of the action as columns.

alt_name	date	application_fees	tution_fees
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Query results operations

4. **Uncertainty Page:** Here the user enters uncertainties. A check box is given to select whether the uncertainty is deterministic or not. Three radio buttons are provided to choose between functional, informational and conditional uncertainty.

Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the uncertainty:

Fees

☒ Deterministic  
☐ Informational  
☐ Conditional  
☐ Functional

Save

Next

Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the uncertainty:

security\_fees

☐ Deterministic  
☐ Informational  
☒ Conditional  
☐ Functional

Save

Next

## Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the uncertainty:

- ☐ Deterministic
- ☐ Informational
- ☒ Conditional
- ☐ Functional

Save

Next

## Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the uncertainty:

- ☐ Deterministic
- ☒ Informational
- ☐ Conditional
- ☐ Functional

Save

Next

## Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the uncertainty:

Placements

☐ Deterministic  
☐ Informational  
☐ Conditional  
☒ Functional

Save

Next

## Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Enter the uncertainty:

Teaching\_capability

☐ Deterministic  
☐ Informational  
☐ Conditional  
☒ Functional

Save

Next

A table named uncertainty is created which contains alternative name, uncertainty name, type of edge and type of uncertainty.

Options

↔T↔

▼

					id	name	type	edge_type		
<input type="checkbox"/>		Edit		Copy		Delete	26	Fees	Deterministic	informational
<input type="checkbox"/>		Edit		Copy		Delete	27	security_fees	Non_deterministic	conditional
<input type="checkbox"/>		Edit		Copy		Delete	28	hostel_fees	Non_deterministic	conditional
<input type="checkbox"/>		Edit		Copy		Delete	29	Reputation_of_college	Non_deterministic	informational
<input type="checkbox"/>		Edit		Copy		Delete	30	Placements	Non_deterministic	functional
<input type="checkbox"/>		Edit		Copy		Delete	31	Teaching_capability	Non_deterministic	functional

⬆

☐ Check all

With selected:

Edit

Copy

Delete

Export

If a user enters conditional uncertainty then our system allows the user to enter the source and sink uncertainty. For example if **Fees** consists of **hostel\_fees** and **security\_fees**. So our system allows the user to save such uncertainties also.

## Conditonal Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Select Conditional Uncertainty

Select Sink Uncertainty







## Conditonal Uncertainties

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Select Conditional Uncertainty

Select Sink Uncertainty

A table named **uncertainty\_to\_uncertainty** is created which contains the uncertainty ids of source and sink uncertainty.

+  information_unc	+ Options	
+  institute_attribute	u1	u2
+  objectives	27	26
+  uncertainties	28	26
+  uncertainties_to_uncertainties		
+  information_scheme		

☐ Show all



5. **Objectives Page:** Here the user enters the objective which consists of imperative verb + noun pair.

## Objectives

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Input objectives for the decision Maximize ▾

Save

## Objectives

\* Since these attributes are added as columns make sure they follow the naming convention for columns

Input objectives for the decision Minimize ▾

Save

A table named objective is created which contains objective id and objective name.

+ Options

					id	imperative	verb		
<input type="checkbox"/>		Edit		Copy		Delete	15	Minimize	Cost
<input type="checkbox"/>		Edit		Copy		Delete	16	Maximize	Safety

 ☐ Check all    With selected:  Edit  Copy



**6. Alternative Page:** Here the user enters different alternatives for which decision has to be taken.

**Alternatives**

Enter Alternatives to be considered

**Alternatives**





Enter Alternatives to be considered

**Alternatives**

Enter Alternatives to be considered

A table named alternative has been created which contains alternative id and alternative name.

+ Options

					id	alt_name		
<input type="checkbox"/>		Edit		Copy		Delete	15	IIITD
<input type="checkbox"/>		Edit		Copy		Delete	16	Thapar
<input type="checkbox"/>		Edit		Copy		Delete	17	NIT_Raipur
	<input type="checkbox"/>	Check all	With selected:			Edit		

7. **Action\_object:** The user enters the value for the actions.

**Action Object**

Select Alternative

Select Action Attribute

Value

**Save**

**Action Object**

Select Alternative

Select Action Attribute

Value

**Save**

A table called `institute_attribute` has been created which contains all the values for a particular alternative.

+ Options

alt_name	date	application_fees	tution_fees
IIITD	23/05/2020	1000	95000
Thapar	NULL	NULL	NULL
NIT_Raipur	NULL	NULL	NULL

8. **Objective Object:** The user enters the value for the objectives.

**Objective Object**

Select Alternative

Select Action Objective

Value

**Objective Object**

Select Alternative

Select Action Objective

Value

A table called `alt_objectives` has been created which contains all the values for a particular alternative.

alt_name	Minimize_Cost	Maximize_Safety
Thapar	NULL	NULL
NITRR	NULL	NULL
hufhf	NULL	NULL
IIITD	keep_upto_80000	safe_environment

**9. Uncertainty\_object:** The user enters the value for the uncertainties.



The screenshot shows a web form titled "Uncertainty Object" on a light blue background. It contains three input fields: "Select Alternative" with a dropdown menu showing "IIITD", "Select Uncertainty" with a dropdown menu showing "Teaching\_capability", and a text input field for "Value" containing the word "good". Below these fields is a teal "Save" button.



The screenshot shows the same "Uncertainty Object" form. In this instance, the "Select Uncertainty" dropdown menu shows "Placements" instead of "Teaching\_capability". The "Value" text input field now contains "Very\_good". The "Save" button remains at the bottom.



The screenshot shows the "Uncertainty Object" form with the "Select Uncertainty" dropdown menu set to "Reputation\_of\_college". The "Value" text input field contains "good". The "Save" button is positioned at the bottom of the form.

A table called alt\_uncertainties has been created which contains all the values for a particular alternative.

Options

alt_name	Teaching_capability	Placements	Reputation_of_college
Thapar	NULL	NULL	NULL
NITRR	NULL	NULL	NULL
hufhf	NULL	NULL	NULL
IIITD	good	Very_good	good