Digital Image Processing

Color Coded Academic ICal

Team ID : 22

Team Members:

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Problem Statement

Input: Image of the calendar
Output: Converted ICal
Given an image of a academic calendar convert it into a form that can be modified by the users. Basically we have to convert the text in the image to editable text. This text can then be converted into a color coded ical.
How things will be Done:
- Detect the edges using edge detection algorithms.
- Seperate each blocks from the image.
- First recognize text in the image and then separate them.(First separate the words and then separate the individual characters from the words.)
- Detect the words in the seperated images.
- Detect colors from the image.
- Construct an object which stores information gained from the converted text.

GitHub Link:

https://github.com/appari/dip_project

Results of project

1. **Detect edges:** Detect the edges in the image so that we can be able to identify the text in each block separately.

2. **Separate the blocks:** Separate the blocks from the image and recognize the text in the image.

3. **Recognize text :**Given the image of the calendar we must be able to get the text from them and store them.

4. **Detect Text:** Detect the text that is recognized and convert it into editable text.

5. **Extract the colors:** Must be able to extract different colors from the image have to store them.

6. **Construct a Object :** Must be able to construct a object from the above data which can be converted into any type of Calendar.

   We will finally get a object which stores all the information there in the image including the colors. Then use this object to generate the color coded ical.

Milestones

Milestone	*Date*	*Task allocation*
Gather the background information for the project	October 4	(Both)
Detect the edges	October 8	Appari Lalith

Detect the edges using and separate block	October 22(Tentative)	(Both)
Seperate the blocks	November 5	(Both)
Detect Colors from the image	November 9	Sai Preetham
Gather various types of information from the Image and convert them into an object	November 14	(Both)
Construct an ical	November 15	(Both)

ACADEMIC CALENDAR
(WINTER SEMESTER 2018)

Week 0 (Dec-Jan)						Week 1 (Jan)						Week 2 (Jan)						Week 3 (Jan)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
25	26	27	28	29	30	1	2	3	4	5	6	8	9	10	11	12	13	15	16	17	18	19	20
		Semester Begins	3 Days Module for Btech Students				1st Day of Class	Last day for Late Regn		Last day for course Add/Drop		SGICW Presentation											Odyssey

Week 4 (Jan)						Week 5 (Jan-Feb)						Week 6 (Feb)						Week 7 (Feb)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
22	23	24	25	26	27	29	30	31	1	2	3	5	6	7	8	9	10	12	13	14	15	16	17
				Republic Day																Mahashiv ratri			

Week 8 (Feb)						Week 9 (Feb-March)						Week 10 (March)						Week 11 (March)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
19	20	21	22	23	24	26	27	28	1	2	3	5	6	7	8	9	10	12	13	14	15	16	17
Mid-Sem Examinations (17-24 Feb 2018)						Mid Recess									Last Date for Late Drop	Research Showcase (Tentative)							

Week 12 (March)						Week 13 (March)						Week 14 (April)						Week 15 (April)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
19	20	21	22	23	24	26	27	28	29	30	31	2	3	4	5	6	7	9	10	11	12	13	14
									Mahavir Jayanti	Good Friday											Pre-Registration Starts		

Week 16 (April)						Week 17 (April)						Week 18 (April-May)						Week 19 (May)					
Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat	Mon	Tue	Wed	Thur	Fri	Sat
16	17	18	19	20	21	23	24	25	26	27	28	30	1	2	3	4	5	7	8	9	10	11	12
	BTP Submission		Last day of class			End-Sem Examinations/Labs/Demos/Projects						Dropped GH	BTP Presentation					Moderation Meeting	Summer Vacation Starts			Announcement of Grades (Tentative)	Pre-registration Ends

TT: Adjusted Days
23-Jan (Tue) MONDAY's Time-Table	
30-Jan (Tue) FRIDAY's Time-Table	
16-April (Mon) FRIDAY's Time-Table	
H: This includes Saturdays/Sundays and GH	

GH: Gazetted Holidays
26-Jan	Republic Day (Friday)		14-Feb	Mahashivratri (Wednesday)		2-Mar	Holi (Friday)
29-Mar	Mahavir Jayanti (Thursday)		30-Mar	Good Friday (Friday)		30-Apr	Buddh Purnima (Monday)

Time-Table Adjustment	Dropped GH	Important Events	Registration Dates