

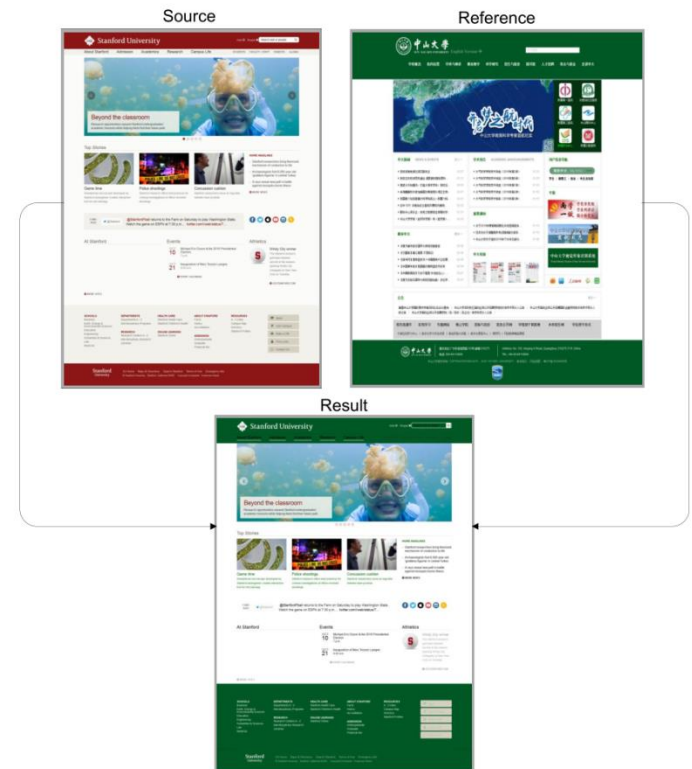
Example-based web page recoloring method

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Problems & Ideas

- Problems of reusing real web page's colors to recolor a web page
 - Some elements in a web page have semantic relations and should have the same recoloring strategy to keep the relations.
 - Finding a mapping between the elements in two web pages is an NPC problem
- Ideas: Cluster-based recoloring
 - Clustering the related elements
 - Mapping the clusters in web pages



Main Contributions

- The accuracy of clustering

ID	Precision	Recall	F_1 value
1	0.997	0.782	0.876
2	0.934	0.997	0.964
3	0.907	0.84	0.873
4	0.977	0.687	0.808
5	0.984	0.913	0.946
6	0.994	0.966	0.980
7	0.999	1.0	0.999
8	1.0	0.953	0.976
9	0.964	0.975	0.969
10	0.990	0.834	0.906
average	0.976	0.895	0.930

- The accuracy of matching

Set	<i>elem</i>		<i>txt</i>		<i>render</i>	
	p01	p03	p01	p03	p01	p03
5,1	0.414	0.425	0.724	0.801	0.859	0.773
5,2	0.343	0.319	0.320	0.417	0.754	0.772
5,3	0.578	0.383	0.636	0.580	0.744	0.533
5,4	0.487	0.592	0.651	0.759	0.911	0.718
5,6	0.45	0.475	0.816	0.883	0.893	0.855
5,7	0.386	0.463	0.349	0.571	0.774	0.877
5,8	0.350	0.444	0.614	0.772	0.675	0.850
5,9	0.676	0.421	0.752	0.611	0.79	0.843
5,10	0.505	0.462	0.843	0.779	0.985	0.912
average	0.454		0.660		0.788	

- The recoloring example

