

SongShape Project Plan

Ning Chen, Jasper Croome, Rebecca Lantner
CSCI E-14A: Building Web Apps for Data Analysis

	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE	COMMENTS
1	Song Visualization: design unique musical fingerprints						
1.1	Brainstorm & gather inspiration	ALL	11/1/19	11/11/19	10	100%	
1.2	Finalize data requirements: attributes needed for viz, methodology to process audio files	ALL	11/1/19	11/11/19	10	100%	
1.3	Initial design prototyping (sketches, Tableau)	NC & JC	11/1/19	11/11/19	10	100%	
1.4	D3 implementation: static "point in time" song shape	NC	11/6/19	11/18/19	12	20%	NC: I am trying to integrate dynamic effect with the sound wave shapes, so that as the music plays, the corresponding keys are highlighted as their waves increase.
1.5	D3 implementation: "moving" song shape (figure out how to "play" the song & viz simultaneously)	JC & NC	11/12/19	11/26/19	14	5%	JC: I know this needs to utilize "onClick" and the time field from the data, I'm hoping to either leverage the youtube or spotify API to play the music without the issue of royalties or copyright infringement.
1.6	Finalize processing of CSV song library	JC	11/1/19	11/26/19	25	50%	
1.7	Complete initial working draft of viz in D3	NC & JC	11/26/19	11/26/19	0	0%	
1.8	Iterate on draft viz (design & interactivity)	ALL	11/26/19	12/10/19	14	0%	
1.9	Apply visualization technique to all songs	JC & NC	11/26/19	12/10/19	14	0%	
1.10	Complete final visualization	ALL	12/10/19	12/10/19	0	0%	
2	Summary Visualization: explore the song viz library						
2.1	Decide on view (small multiples? interactive bubble chart? etc.)	ALL	11/6/19	11/11/19	5	90%	RL: current concept is a bubble chart, colored by genre and sized by song count. On genre click, category expands into individual song bubbles; on song click, app routes to that song's viz
2.2	Prototype designs (sketches, Tableau)	ALL	11/6/19	11/11/19	5	100%	
2.3	Gather additional metadata for songs in final library (genre, etc.) if needed	RL	11/11/19	11/18/19	7	0%	
2.4	D3 implementation	RL	11/14/19	11/26/19	12	0%	
2.5	Complete initial working draft of viz in D3	RL	11/26/19	11/26/19	0	0%	
2.6	Iterate on design if needed	ALL	11/26/19	12/5/19	9	0%	
2.7	Complete final visualization	ALL	12/5/19	12/5/19	0	0%	
3	Web App: build out essential backend connections						
3.1	Decide on app structure (from user perspective)	ALL	11/9/19	11/14/19	5	50%	
3.2	Create framework for web app (dynamic routes, etc.)	RL	11/14/19	11/21/19	7	5%	
3.3	Front end design	NC	11/21/19	11/26/19	5	0%	
3.4	Complete basic functionality	ALL	11/26/19	11/26/19	0	0%	
3.5	Complete final web app including D3 visualizations	ALL	12/10/19	12/10/19	0	0%	
4	Additional App Functionality: build out "nice-to-haves" if time allows						
4.1	Create user profiles: login, logout, save songs	TBD	11/26/19	12/3/19	7	0%	
4.2	Create ability for users to upload their own songs	TBD	12/3/19	12/10/19	7	0%	