MULTIMEDIA ALGORITHM IMPLEMENTATION

MVP 1 – WEEK 15

Project plan

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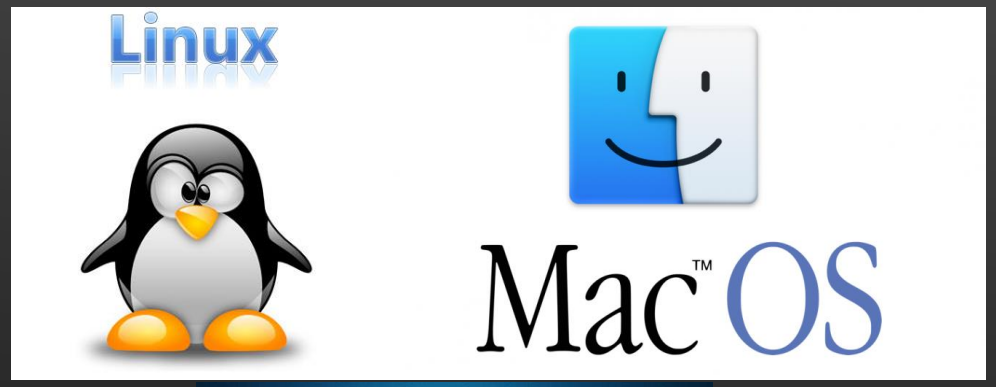
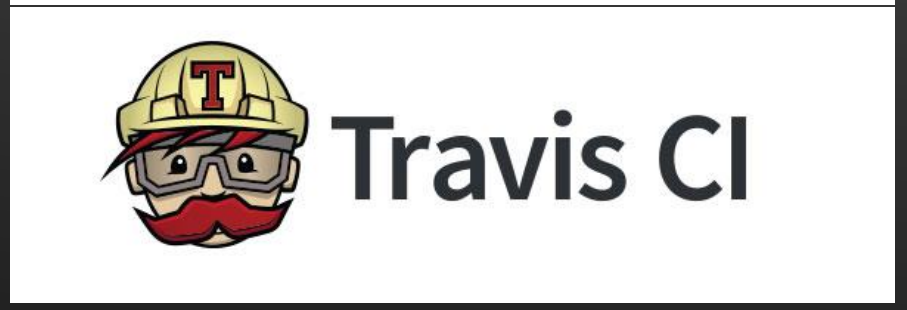
Supported OS



Software



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INTERFACE DESCRIPTION

RESEARCH

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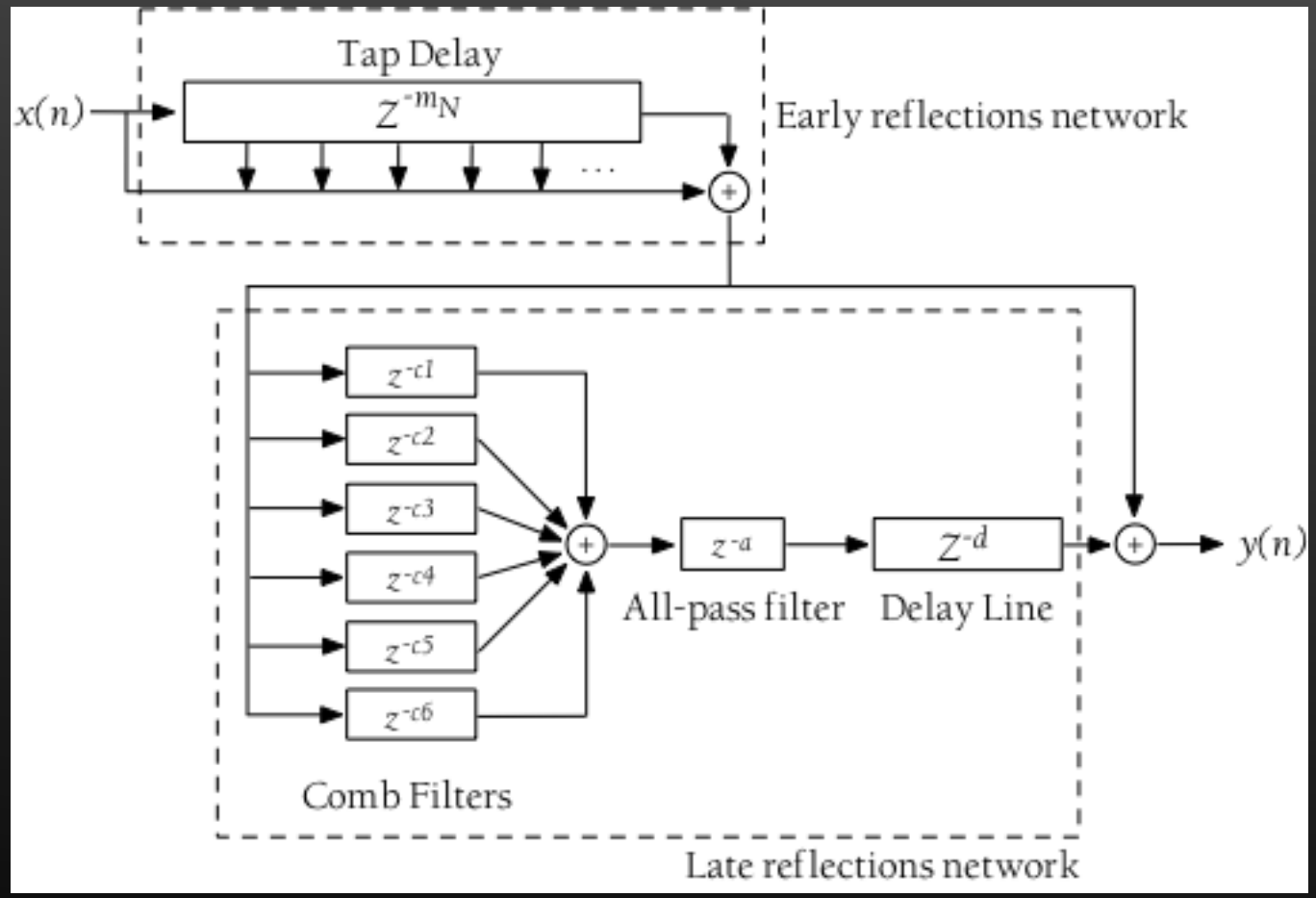
- Schroeder reverberators
  1. SATREV -> comb filters into all pass filters
  2. JCREV -> all pass filters into comb filters
- Moorer – improvement of schroeder design
- How to create a reverb
- Different types of reverbs
- Modifiable parameters



BASE ALGORITHM

THE MOORER DESIGN

- Tapped delay line for early reflections
- A 1st order low-pass filter in the feedback loop of the 6 comb filters for absorption effects of air

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KEY FACTS FOR IMPLEMENTATION

- Type of artificial reverberation -> Delay networks
  - Simulated using delay lines, filters and feedback connections
- Use of feedback loop around the structure -> more natural decay
- More comb filters > more better reverberation
- Different decay times for left and right for a more natural sound

- Meetings to gather individual work

Weeks	Mon	Tue	We	Thu	Fri	Sat	Sun
14		*7pm-9pm*		*6pm-10pm*	*3pm-5pm*		
15	`presentation`	*5pm-7pm*		*12pm-2pm*			
16	`presentation`	*5pm-7pm*		*12pm-2pm*			
17	`presentation`	*5pm-7pm*		*12pm-2pm*			
18	`presentation`	*5pm-7pm*		*12pm-2pm*			
19	`presentation`	*5pm-7pm*		`final presentation`			

SCHEDULE

- Internal due dates for tasks

SCHEDULE

Weeks	Mon	Tue	We	Thu	Fri
14		*>Research*		*>Research >Interface description >Base algorithm*	*>Organisation*
15	*>Make Travis upload release* `presentation`	*>Play processed audio >Read audio file >Shroeder implementation*		*>Make Travis build >Total Moorer implementation*	
16	`presentation`	*>Implement control parameters in algorithm*		*>Add CLI with control parameters >Algorithm improvements*	
17	`presentation`	*>Play audiofile >Save processed audio to file*		*>Make algorithm real-time >Trigger playback by UI*	
18	`presentation`	*Finalisation of the project*		*Preparation of the presentation*	
19	`presentation`		*Submit project online? 10.5.2017*	`final presentation`	

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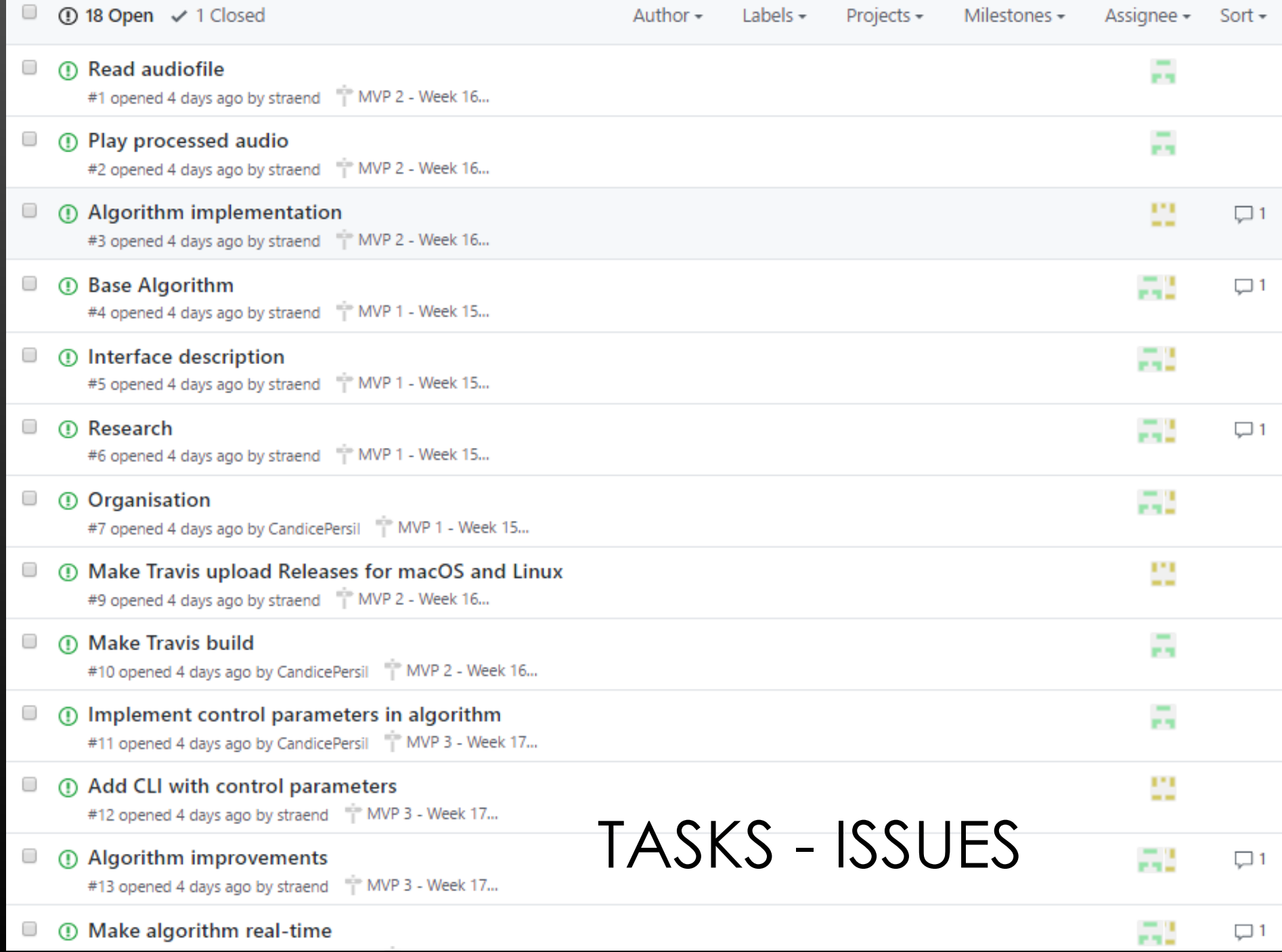

TASKS - ISSUES

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