Live Lecture Feedback App

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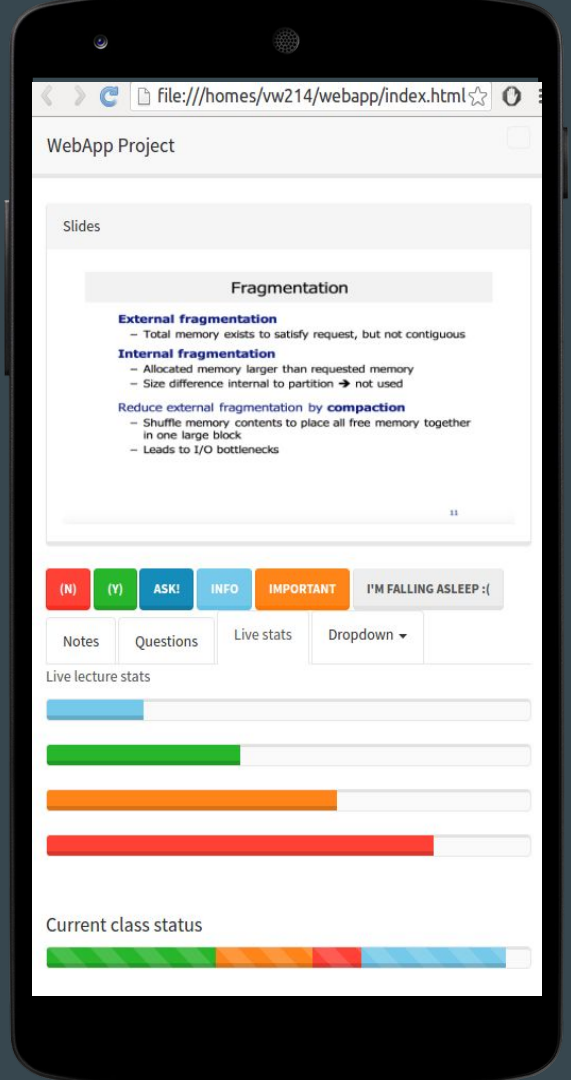
Hidden Layer Cost Gradients 2

- Similarly, for hidden layer L-2 (if there is one) we get

$$\frac{\partial C}{\partial w_{jk}^{L-2}} = \frac{\partial z_j^{L-2}}{\partial w_{jk}^{L-2}} \cdot \frac{\partial a_j^{L-2}}{\partial z_{ij}^{L-2}} \cdot \sum_{i1} \left(\frac{\partial z_{i1}^{L-1}}{\partial a_j^{L-2}} \cdot \frac{\partial a_{i1}^{L-1}}{\partial z_{i1}^{L-1}} \cdot \sum_{i2} \left(\frac{\partial z_{i2}^{L}}{\partial a_{i1}^{L-1}} \cdot \frac{\partial a_{i2}^{L}}{\partial z_{i2}^{L}} \cdot \frac{\partial C}{\partial a_{i2}^{L}} \right) \right)$$

- Differentiating, we get

$$\frac{\partial C}{\partial w_{jk}^{L-2}} = a_k^{L-3} \sigma'(z_j^{L-2}) \sum_{i1} \left(w_{i1j}^{L-1} \sigma'(z_{i1}^{L-1}) \sum_{i2} \left(w_{i2i1}^{L} \sigma'(z_{i2}^{L}) \frac{\partial C}{\partial a_{i2}^{L}} \right) \right)$$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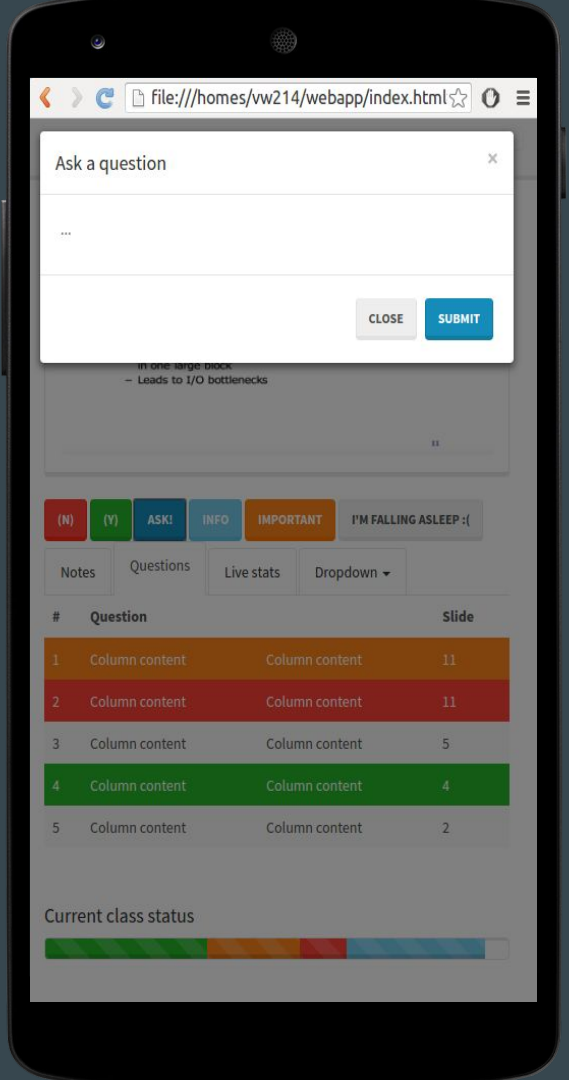
WebApp Project
Slides
Fragmentation
External fragmentation
– Total memory exists to satisfy request, but not contiguous
Internal fragmentation
– Allocated memory larger than requested memory
– Size difference internal to partition → not used
Reduce external fragmentation by compaction
– Shuffle memory contents to place all free memory together in one large block
– Leads to I/O bottlenecks
11
(N)
(Y)
ASK!
INFO
IMPORTANT
I'M FALLING ASLEEP :(
Notes
Questions
Live stats
Dropdown
Live lecture stats
Current class status


file:///homes/vw214/webapp/index.html
Ask a question
...
CLOSE
SUBMIT
– Leads to I/O bottlenecks
(N)
(Y)
ASK!
INFO
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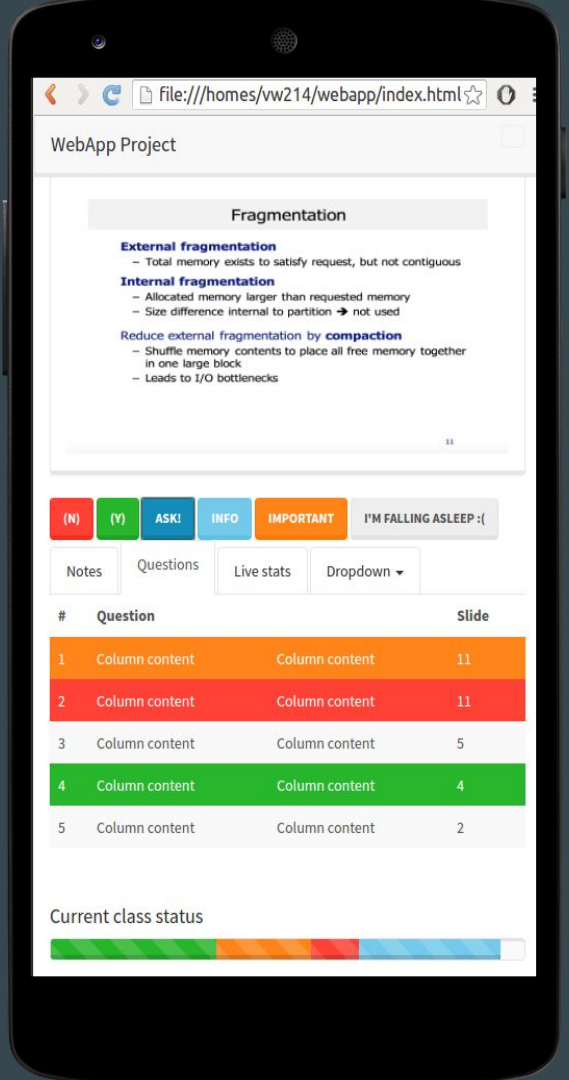
Dropdown
Question Slide
1 Column content Column content 11
2 Column content Column content 11
3 Column content Column content 5
4 Column content Column content 4
5 Column content Column content 2
Current class status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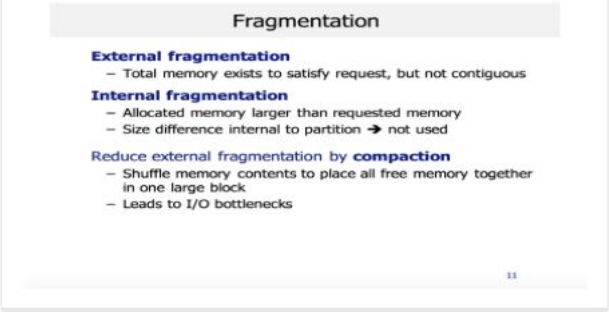
WebApp Project

About My Account

Slides



(N) (Y) ASK! INFO IMPORTANT I'M FALLING ASLEEP :(

Notes Questions Live stats Dropdown

CANCEL SAVE

Current class status

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