

CS132 Capstone Abstract  
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The capstone project I worked on was Blend, an online lending platform. Blend was created for Touloupe Lawal, who wants to spin it out as a business. It is aimed at small communities of individuals who have items they would like to lend out or borrow. Small communities were chosen as the target audience because people are likely to be acquainted with each other and delivery is expedited. The niche that Blend falls into is that there are many things users need to use, but are too expensive for an impulse buy or will be used for too short of a period, such as for a party. Furthermore, there will be users who own these kinds of items that they are not using all the time and would be willing to lend out. For example, items that fall in this category are good speakers, appliances, and sports equipment. No service right now fulfills this crucial niche for miscellaneous items. Existing services focus on one type of good or entirely on buying/selling. Blend makes it a lot easier to find such transactions or, at least, make it known that you are willing to lend something out rather than word of mouth or checking other services not meant for this purpose.

Blend is built on top of Node and a MySQL database. The Blend team thought that the transactional guarantees and other features of MySQL were better for our purposes than NoSQL solutions. In terms of the frontend, Blend uses Mustache for templating, allowing the generation of item previews and other web elements. The frontend forms and pages are primarily created through Bootstrap, which we thought would allow us to build the site we wanted to build quickly. Various Node modules handle different aspects of this app. Images are uploaded using multer and distances are calculated through node-geocoder and google-distance. The features in place right now are lending out/borrowing items, a mostly functional news feed, user profiles, a ratings system, and account creation. It is also an online heroku app that can be found at: <https://blendproject.herokuapp.com/>.

The github repository for blend can be found at:  
<https://github.com/GMNetto/Blend>.

Several reports needed to be written for Blend. They include more information about our design choices, technical stack, and other information.  
<https://docs.google.com/document/d/1ZiNV0znK0TPSt9eUietFzI4cxaMNxBjQj81hfk314-c/edit?usp=sharing>  
[https://docs.google.com/a/brown.edu/document/d/1FHy\\_FAnW4z1H5i5eG5KIC4PBEclyFm6f3zGk2sejCAs/edit?usp=sharing](https://docs.google.com/a/brown.edu/document/d/1FHy_FAnW4z1H5i5eG5KIC4PBEclyFm6f3zGk2sejCAs/edit?usp=sharing)