



Glue IT Feasibility Discussion

Questions and Answers

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What is Glue?

Glue is an iOS/Android app built for students and faculty of DGSOM. It allows members to post lunches and events in a private network intended to create a cohesive and collaborative class.

What is the intention of the Glue team?

Our primary goal is to enhance communication within our class by creating a shared calendar app for posting events open to the whole network. This will enhance the medical school experience by encouraging students to meet each other during lunch and at other events. In addition, it will allow students to connect with each other despite being separated during the rotation years. Faculty will also be able to use Glue to offer mentorship to students. We believe the convenience of having all social and extracurricular events in one place will keep students fully informed and engaged in their school community. Lastly, we see this app as not only a tool to create events, but also to browse past events to remind us of the school's vibrant culture and student traditions.

We are committed to building a great tool - easy to use, engaging, organized and well designed. We intend to fully address DGSOM's needs and comply with its concerns. If it is adopted at DGSOM, we hope to add more features and keep bettering the product. For example, joint events can be created with the Glue networks of other professional schools for interdisciplinary events. These ideas keep us excited and we look forward to implementing these ideas to further benefit DGSOM.

At the heart of our cause is a commitment to quality improvement. This project allows us to gain experience in the technical, business and legal side of innovation. Our ambition is for Glue to eventually be adopted at other professional schools. Due to the costs of development, we are pursuing a business plan that will sustain the project. We will offer Glue to DGSOM free of charge but we intend to offer it to other schools at a cost in order to cover server fees, and costs of development. We hope DGSOM will endorse Glue as a partner or as a customer. We aspire to be bold and innovative while always representing DGSOM by committing to the highest ethical standards of respect, integrity, excellence and accountability.

What is the need for an app to connect faculty to students?

Faculty and students already interact through face-to-face meetings, shadowing, roundtables, lunch talks, and other gatherings. Students and faculty have shown a desire to

engage in mentor-mentee relationships, and we intend to facilitate this interest by removing barriers. With all mentorship events aggregated to one place within Glue, it will be easier for students to find opportunities to interact with faculty. In addition, faculty can post directly into Glue when they are open for shadowing or meeting with students, knowing it will reach their target audience.

Can Glue be used as a recruiting tool to retain the best medical student candidates?

Yes! Glue can be used to show prospective students the rich culture and traditions at DGSOM to project an image of collaboration, cohesion, and harmony. It is our hope that prospective students will also take note of DGSOM's encouragement and mentorship of student initiated projects such as Glue.

Will Glue be replacing any of the existing IT programs?

No, Glue will not be replacing these programs.

My Courses and Angel are the official source for class materials, schedules, and correspondence between the faculty and students. Glue is not intended to list classes or mandatory events that are part of the UCLA curriculum. Instead, Glue will list the many elective academic and non-academic events that students participate in, such as lunch talks, meetings, and outreach events.

These events are currently advertised through emails, various calendars, Facebook pages, Google Groups, and other informal communication. Students would benefit greatly from having a single place where they can search and sign-up for these elective events, in the same way Angel serves as a single place where students can view their academic schedule.

Thus, Glue will focus on the dynamic environment of social networking and cohesion, rather than expanding or replacing the functionality of the school's intrinsic operations.

How much management and pruning does Glue require from SAO staff or the IT staff?

Glue is planned such that events will be posted entirely by students, who are considered the “content creators” for the app. Student Organization leaders will be responsible for posting their own events on Glue, as will hosts of various extra-curricular activities.

Students can also handle network management by delegating a student administrator within the MSC. The administrator can remove inappropriate content, promote events for greater visibility (Glue’s Spotlight function), and add additional administrators. This MSC position can also be responsible for adding official extra-curricular events that don’t fall under the responsibility of separate student organizations, such as Block Party. The SAO is welcome to post their events in Glue if they choose to do so but this can also be delegated to a student.

However, we would like the SAOs assistance in setting up the network by inviting students to join Glue. This will involve sending current DGSOM students instructions as to how to set up the app and their account. We believe that the SAO is in the best position to carry out this role because they are a greater and more central authority than the MSC. The Glue team can provide support for students who need assistance with this process. In addition, we’d like

the SAOs assistance in sending out similar emails to each new successive class each year. Thus, Glue will involve little day-to-day management from the SAO, but we do ask for assistance in bringing students into the network.

Security of student data and access

We understand there are concerns over external access of student information. The security of student and faculty data is of the utmost importance. To address this concern, we plan on having a 2-step approval process to be allowed entry into the Glue network. A Mednet email will be required and an invitation from the SAO; this will limit the accessibility of Glue to only current students and faculty/residents at the moment. There will be no personal information shared on Glue unless it is voluntarily posted. We guarantee that all user information and content on Glue will not be shared with any outside sources nor the data mined in any way. Moreover, our server, Parse (Supports Amazon/Facebook's Mobile apps), will not access or interact with any of our data.

Where will the Glue be hosted?

Currently, we are hosting Glue on Parse, a complete mobile app platform powered by Amazon's cloud servers. Parse's physical infrastructure is hosted on Amazon's secure data centers and utilizes the Amazon Web Service (AWS) technology. Amazon is one of the world's largest data center providers and has thousands of network engineers and data security experts that work constantly to make sure the data is secure from both physical and cybersecurity risks. National Agencies, such as NASA, use its services. Amazon continually works to manage risk to data security and compliance to industry standards.

Due to robustness of Amazon's data centers, we ascertain that hosting Glue on Parse is the best way to secure our user's data. In addition to the rigorous data security offered by Amazon's data centers, the costs associated with using Parse as our backend client is much cheaper than using internal servers. The total costs of electricity, support engineers, and servers would cost thousands of dollars to maintain on an internal network.

There is a concern for stalking behavior, especially with the Maps tool. How will this be addressed?

Glue contains a feature that allows users to specify their work address. Other users can then visualize this location on a map. The purpose of this feature is to allow students to visualize where other students are rotating when their work addresses are constantly changing. This information will help students plan events with each other and further facilitate interaction. However, this is completely optional and requires manual updating from the user. It also shows the user's work address rather than their current location, which further limits its potential as a "stalking tool". Finally, this information is only shared with other members of the closed Glue network, people who the user most likely already knows.

What kind of endorsement or affiliation does Glue seek from the school? The school cannot endorse any event that involves alcohol, drugs, or misconduct.

The purpose of Glue is to aggregate all official and non-official extracurricular events into one place to increase students' participation in them. Glue will be a student initiative that bridges the entirety of the student experience. Thus, Glue seeks a relationship with DGSOM that allows it to list non-official events that are relevant to DGSOM students, such as mixers and study groups. We realize that DGSOM cannot be associated with certain behaviors. Firstly, we believe professional school students will use their best judgment on a network that hosts their peers and faculty, and will conform to the professional standards of conduct set by the school. In addition, the information hosted on Glue will never be made public and will only be viewable by members of the network. Nevertheless, we believe we can further address this issue with a combination of the following options:

1. Glue can be set up independent from the school and have DGSOM be an "official customer" of Glue. Thus, Glue can have a relationship with DGSOM, but DGSOM wouldn't have to endorse every event that is posted.
2. A legal disclaimer will be included to the effect that students can post freely but the school does not endorse drinking, drugs, misconduct etc.
3. We implement a system of checks within the app that allows administrators (Staff) and moderators (students) to flag or delete inappropriate content. However, we foresee this as a last resort.

Addressing the concern over a June 1st roll-out date.

We realize June 1st is fast approaching and is no longer a realistic date for roll out. However, we hope to implement Glue early in the summer so our class (2016) will have the opportunity to connect with each other during the 3rd year rotations. We truly believe Glue will make a big difference during 3rd year. In addition, this will allow Glue to be established in preparation for the entrance of the Class of 2018.

We also think it is beneficial to implement glue earlier because this will allow DGSOM to showcase it's vibrant student life to prospective students during medical school interviews and second-look; we guarantee this will be memorable and persuasive to prospective students and serves as a marker of DGSOM's embrace of innovation and technology.

(For reference)

Data Usage Appendix

What follows is a breakdown of the potential usage we anticipate at DGSOM. We can upgrade our servers so the scalability will not be a problem when more users adopt Glue.

At DGSOM, we estimate 600-1000 users will initially join Glue. These calculations are based off of this user base.

Parse Servers Pro Plan:

-15,000,000 API requests to the server each month. 5 cents/1000 over

-5,000,000 pushes/month. 5 cents/1000 over

-10 GB of data storage. 15 cents/1GB over

-Burst Limit is 40/sec (the maximum allowable API requests per second), which is sufficient for our needs. This is negligible issue for us due to the fact that our members do not exceed 15,000.

Estimate that at a maximum, every user will post/edit 50 times/day.

Estimated that at a maximum, every user will want 50 push updates/day

Maximum of 23 weekdays/month.

$1000 \text{ users} \times 50 \text{ posts} \times 23 = 1,150,000 \text{ API requests/month}$

$1000 \text{ users} \times 50 \text{ pushes} \times 23 = 1,150,000 \text{ pushes/month}$

As calculated, we are well under the allotted amounts for data usage even at the "theoretical maximum" usage.

The cost of the Parse mobile app server is \$200 per month.

Parse's data center operations are accredited under:

ISO 27001

SOC 1/SSAE 16/ISAE 3402 (previously SAS 70 Type II)

PCI Level 1

FISMA Moderate

Sarbanes-Oxley (SOX)

PCI

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