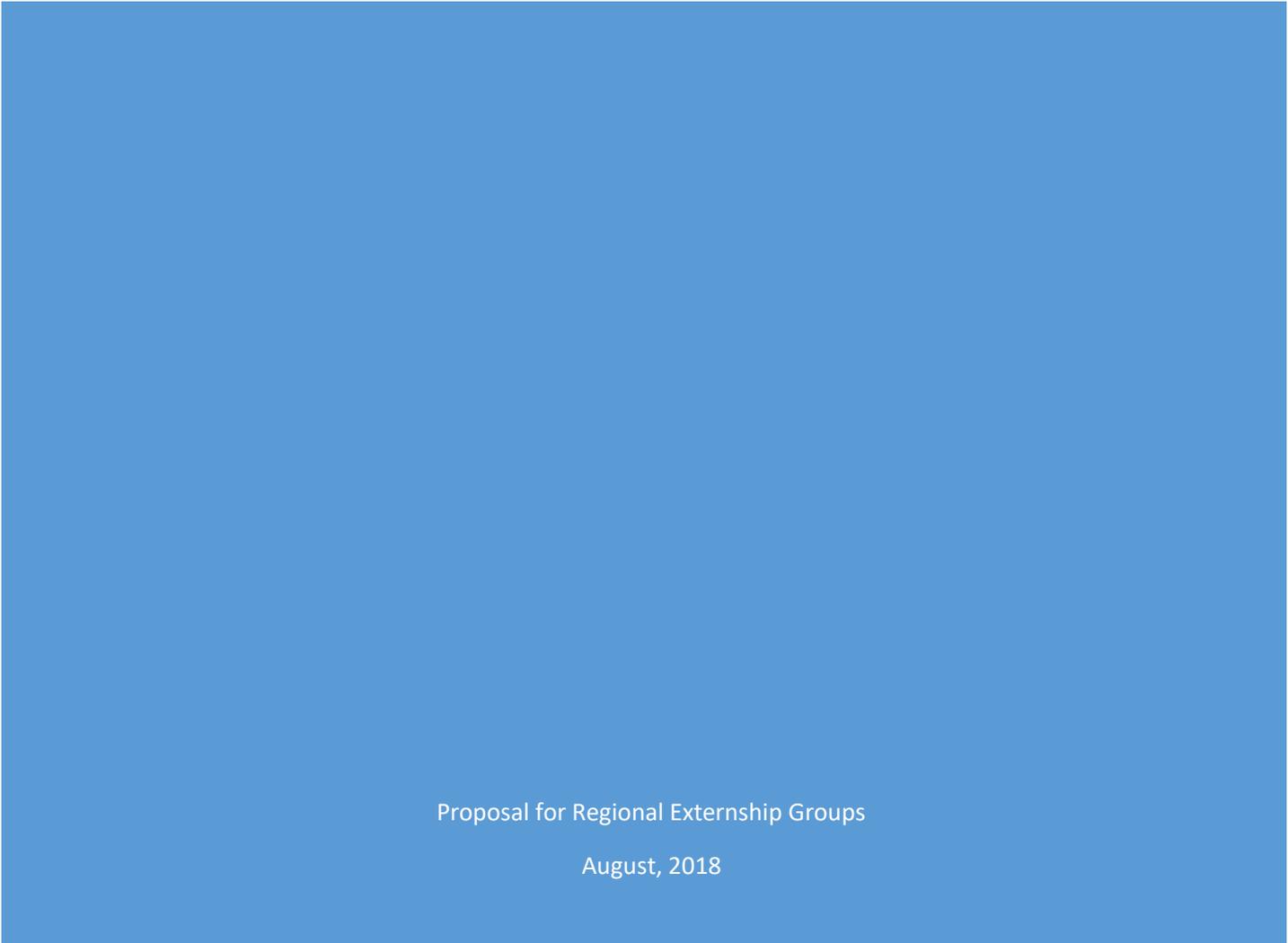




PracticumFit.com

Student Application and Practicum/Externship Matching Service



Proposal for Regional Externship Groups

August, 2018

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Overview

PracticumFit.com provides proven, user-friendly, streamlined ranking and matching services to educational consortia in the psychology field. Schools participating in an electronic match know they are

providing their students with the best opportunity to connect with an excellent Externship or Practicum experience for the coming year. Students gain peace of mind, of knowing they have achieved the best possible match available to them according to their preferences, and Practicum Sites save significant time and energy in their hiring processes. The results of a PracticumFit electronic match are more fair, more reliable, more efficient, and much lower-stress than any other match process available to the psychology community.

Lunchbreak Labs, LLC herein offers several possible avenues to allow multiple regional Psychology Externship and Practicum consortia to replicate or build on the services provided to BAPIC, the Bay Area Practicum Information Collaborative.

Two main services are outlined: Hosting of Site Directories for Practicum/Externship Sites, and a secure, online Ranking and Matching Service to allow sites and students to be optimally paired with one another based on their ranked preferences.

The proposal provides pricing and scope for:

1. Allowing one or more regional groups to individually replicate BAPIC's services, at low cost, with no overlap of services between groups.
2. The transition to a nationwide Externship/Practicum Match in which multiple regions would participate, with combined directory hosting and a single match calendar. This solution would enable sites to participate in multiple regions using one account. It would provide a simple path to facilitate remote learners seeking practicum/externship experiences in geographical regions outside that of their school.

Additionally, an Application Submission and Letter of Recommendation platform is available, as well as augmentations to the base matching algorithm to accommodate the needs of larger or more geographically disparate matches. These features are described but have not been priced in this document.

Description of Services for a Single Region – Replicating BAPIC

The following services are a basic description of those provided to the BAPIC group, and the above pricing reflects minimal adjustments to that system. If modifications to the system's functionality are needed for a specific regional group, those changes can be scoped and, if appropriate, estimated separately upon request.

Site Directory Hosting

Each Practicum/Externship Site will have a separate listing in a customizable, updateable, searchable Site Directory which exists behind a password-protected wall.

Customizable Directory Form

The Steering Committee for the Regional or National Consortium will be able to establish and update the content of the directory form, with an unlimited number of directory questions. Content types for questions include short and long text box, numbers, dates, and single- or multi-select drop down lists. Specific questions can be hidden from Student users if they are for administrative purposes.

Directory Updating by Site Administrators

Each Site Administrator account on PracticumFit will have the ability to update directory information for Sites they manage at any time. Annually, certain entries in the directory form can be cleared for updating for the new match year. This allows regions to verify that the directory information is up-to-date and has been recently reviewed for all sites. Please note that Directory information is organized per Site, whereas Ranking and Matching occurs based on one or more 'Tracks' that a Site lists openings for. Track-specific information is displayed and edited in the 'Tracks' section of the platform.

Search Functionality

The directory supports keyword searches among the name and description, as well as an "advanced" search function for matching sites by specific criteria. Though the entire form will not be searchable, PracticumFit and regions can define a limited set of criteria (such as public transportation availability, ADA access, etc) to enable students to refine their site search more precisely.

Archived Sites

If sites in a region are no longer active in the match process for one or more years, their data can remain hosted in the system and the site will be marked as Inactive. This allows a Site to take a hiatus for one or more years and then return to active involvement in the Match.

School-Site Relationships

Mutual Site Selection

School Program Administrators (Program Admins) and Site Administrators mutually confirm the relationship which allows a school's students to pursue practica or externships at that Site. Once that relationship has been confirmed in the system by both parties, the school's students will be able to view that site in their Site Directory and select Tracks from that site for ranking.

Directory Viewing

School Program Administrators and Site Administrators have access to view the full directory of all Sites in the system. Student users, via their own personal login or their school's general Directory Access Account, can view only those Sites which have a confirmed relationship with their school.

Student Matching Solution

PracticumFit's core solution is a web-based application where students, program administrators, and site managers can all log in to a unified, friendly, modern tool to manage, view and rank their preferences in Practica or Externship relationships. The matching algorithm, based on the concept of multi-party preferential matching, will allow each side (students and sites) to rank order one another, and then procedurally assign students to the appropriate externship site. This is accomplished using the Gale-Shapely stable matching algorithm.

Matching Process

The match process is based on the Nobel Prize-winning Gale-Shapely algorithm, and functions similarly to other internship matching systems. Students can rank any tracks they have applied to, from most to least desirable. Externship and Practicum sites can set the number of openings for a given track, and rank students which have applied to that track. The system will then procedurally move through all possible iterations, ensuring that as many students as possible are placed in a position, and that students and sites are matched based on their preferential ranking of one another. More information is available about the matching algorithm upon request.

Match Results Notification

Match results are calculated a few days after the Ranking window closes, and then held on a secure platform until just before Match Posting time, when the matches are uploaded to the PracticumFit site. At a pre-determined time (based on the annual calendar set by the consortium), all students and externship/practicum sites are notified via email of the results of the match. This process typically takes less than one minute to complete sending, ensuring all parties are notified as close to the same time as possible. Students and sites may also log on and review their results on their profile page. These results will remain in place for the remainder of the year, until the system is reset in preparation for new students.

Match Privacy Guarantee

It has been Lunchbreak Labs' policy not to disclose the exact rank order of students or sites at any time. However, on occasion, students or sites feel they have been matched "unfairly" and wish to question the results or process. It is therefore recommended that regions have a neutral party (neither the student, program administrator, or site administrator) review the submission data. *In years of operation and tens of millions of possible matchings, the Lunchbreak Labs matching algorithm has never incorrectly matched a student to a site.*

User Roles

Directory Access Accounts

In the BAPIC system, the Site Directory is kept behind a password-protected wall. Each school in the system is provided with a generic login name and password which can be given to any student or other individual to allow them to view the school's Site Directory (displaying only those Sites who have an established relationship with the school) without creating a personal account. All other account types are for individual users only, and all user types have Directory viewing access.

Student Accounts

Students will be invited by their program to register, via email. Once they have registered, students will pay their access fee (via credit or debit card), set basic profile information (name, contact information), and select the sites they are interested in applying to.

Program Administrators

Member programs will need to designate one or more program administrators, responsible for administrative functions related to their students. Administrators are responsible for selecting which of the internship sites are available to their program, inviting students to the program, and reviewing match results. Program Administrators are able to track the progress of their students throughout the ranking process. A program can have multiple administrators, and there's no limit to the number of administrative accounts or individual programs at a school.

Site Managers

Site Managers are representatives of individual externship and practicum sites. They will be able to edit their Site's directory information, confirm relationship with schools in the system, list which positions they have open (and how many students they can accept to a given track), and rank-order students once interviews have been completed. Sites may have as many administrators as they like, and site administrators can manage multiple independent sites.

Super Administrators

In addition to PracticumFit support staff, Regions should designate one or more people as "super administrators". These people will be able to perform tasks that have fewer restrictions than other users (including overriding system defaults, changing data that users cannot change on their own, and exporting CSV or XLS reports of user data. It is recommended that this person be familiar with the process and policies of their region, as well as fairly technically savvy, since a Super Administrator role can delete sensitive data (such as user accounts) that would take time to recover.

Pricing – Individual Replication of BAPIC for one or more Regions

Cognizant that different regional groups may find different funding structures more feasible or appealing based on their specific circumstances, PracticumFit.com has assembled several different pricing structures which all offer strong benefits and competitive costs to users.

Setup costs can be minimized if several regions sign on at once for PracticumFit electronic matching and Directory hosting. A setup involving a multi-region national match also offers decreased setup costs.

Of special note in the per-user pricing; PracticumFit.com has made note in the past of concerns over student costs for low-income students. To accommodate this concern, we offer two possible price points for student users: one which is a flat fee for all students, and one which is a slightly increased fee, but includes the option for schools to designate some students as low income and waive their matching fees to diminish the burden of matching costs on those who cannot easily bear them.

Set-Up and Annual Site Directory Hosting/Maintenance

Description	Price
Setup and Config of Student Matching & Site Directory on a dedicated Subdomain <ul style="list-style-type: none"> - Branding/deployment to <region>.PracticumFit.com or <region>.ExternFit.com - Minor changes to existing match process and website text - Import of Site Admin and Program Admin Accounts - Creation of Customizable Regional Directory Platform - Creation of SuperAdmin account for region's Support Representative 	\$2,500
Training and Support Materials <ul style="list-style-type: none"> - Online documentation for students and administrators - Online training session for the region's designated Support Representative 	<i>included</i>
Email-based technical support	<i>included</i>
Annual Directory Hosting and Data Backup <ul style="list-style-type: none"> - High performance, secure hosting platform - Nightly database backups - Annual data archiving (and purge of student records) 	\$1,000/yr <i>waived for 1st year</i>
Total Cost	\$2,500
Multi-Region Discount – If 3 or more regions are being set up in the same time frame	-\$1000
Adjusted Total Set-Up Cost with Discount	\$1,500
Annual Directory Hosting Fee for 2nd Year and Onward	\$1000/yr

Setup and Config Cost will increase to \$4000 if the requested system launch date is less than 45 days following notification of acceptance.

Note that this cost does not include import of an existing Site Directory. If Site Directory Import is desired those costs will be scoped separately based on the region's needs.

Single-Region Per-User Pricing Options

PracticumFit's main income is based on a per-user, per-year model. Students, or students and sites, pay an annual fee to participate in that year's Match process. *Program administrator and site administrator accounts are not paid or limited in quantity.*

PracticumFit is excited to offer the following options for all regional Practicum/Externship students and sites:

Student-Only Fee Models:

This allows students to pay a flat fee, regardless of how many sites they apply to, and regardless of the total number of sites participating in the regional match. PracticumFit is designed to be affordable for as many students as possible without sacrificing quality or system stability.

Payments are made annually by each student via major credit card as part of their initial registration on PracticumFit.com, through a secure online payment platform. Any student may withdraw from the match process and request a full refund at any time until the date that the Ranking period ends.

Option 1a – Student-only Flat Fee: \$50 per student per year. No cost to Schools or Sites.

Option 1b – Student-only Flat Fee with Low Income Waiver: \$60 per student per year, with fee waivers (managed by regions or schools) available for up to 10% of the regional student count. This model is intended to allow us to better meet the needs of low-income students. No cost to Schools or Sites.

Note: Option 1a is the current pricing model used by BAPIC. Within the BAPIC organization, all students pay the online fee; some member schools take on matching costs and subsequently reimburse their students' fees.

Student Fee + Site Fee Model:

If a more evenly-spread pricing model is preferable, the following alternative fee schedule for students and sites also meets PracticumFit's income needs, based on the Student and Site estimates provided by regional groups. *Sites may each have an unlimited number of tracks, openings, and administrator accounts for their annual fee. Lunchbreak Labs is not equipped to process invoices via means other than major credit card for Site users.*

Option 2 – Student/Site Flat Fee: \$35 per student per year, and \$90 per site per year, paid via major credit card by all students and all sites. No cost to Schools.

Lump Sum Model

Option 3 – Regional Invoicing: Through elimination of credit card processing fees and payment processing platform, we are able to offer a 5% fee decrease if paid in a single annual lump sum by the regional consortium prior to match posting. If a region prefers this option, please contact us to arrange pricing and payment schedule.

All pricing models listed here assume a minimum student count participating in the region. Should student numbers fall below 200 match participants in a given year, PracticumFit may request an additional flat fee for service maintenance in years following, to reflect non-scaling costs, which will be negotiated at that time.

Modifications for a Multi-Region National Match

Directory

All Sites nationwide would be hosted, on the back end, in a single directory database. Since Site data is in considered confidential and of value to some regional groups, display would typically be filtered by region for all users. Sites could associate with more than one region if the Regional Administrator marks them as such.

Regional Administrator

A new account type, that of Regional Administrator, would be created, which would have the power to manage School Programs and Sites and all associated accounts for their Region. They would not have access to the data for other regions, other than the ability to cross-list sites that already exist for another region. Students could also receive authorization to rank Sites located in another region, with approval of the relevant Regional Administrators.

Regional Logic Updates

Many sections of the PracticumFit platform would need small modifications to check for region before displaying data or performing other site functions. Should the National Platform section of this proposal be adopted, a full narrative of the proposed changes will be established by PracticumFit and whatever Steering Committee is established to administer the National Platform. Once these changes are agreed upon by all parties, PracticumFit developers need 60 days to launch the system with all changes and updates.

Pricing - Creation of a National Practicum/Externship Directory and Match

Combining all Regions into a single national directory and match entails modification of the existing PracticumFit system as used by BAPIC, to accommodate an additional tier of Regional Administrator accounts and the addition of regional-based tagging and logic on many parts of the site. Complexity of maintenance and technical support also increases. To reflect these factors, this section of the proposal scopes a slight increase in annual per-user pricing, but presents a decrease in total setup and hosting costs if three or more regions pursue this. Please note that Site Directory Content, Match Calendar, and Pricing Scheme must be agreed upon for all regions.

Set-Up and Annual Site Directory Hosting/Maintenance

Description	Price
Setup and Config of National Match & Site Directory on a dedicated Subdomain <ul style="list-style-type: none">- Branding/deployment to dedicated subdomain- Minor changes to existing match process and website text- Import of Site Admin and Program Admin Accounts- Creation of National Directory Platform- Creation of Regional Admins for each region's Support Representative	\$4,000

Platform Modifications to Accommodate a Multi-Region Match	\$8,000 - \$10,000
- Creation of Regional Admin Account Type and Admin Platform	<i>waived for 2000+ student users</i>
- Additional of Regional Logic throughout site	
Training and Support Materials	<i>included</i>
- Online documentation for students and administrators	
- Online training session for the region's designated Support Representative	
Email-based Technical Support	<i>included</i>
Annual Directory Hosting and Data Backup	\$2,500/yr <i>waived for 1st year</i>
- High performance, secure hosting platform	
- Nightly database backups	
- Annual data archiving (and purge of student records)	
Total Cost	\$4,000
Annual Directory Hosting Fee for 2nd Year and Onward	\$2500/yr

System launch date cannot be less than 60 days after notification of acceptance.

Note that this cost does not include import of an existing regional Site Directory. If Site Directory Import is desired those costs will be scoped separately.

Annual Per-User Pricing Options for a National Match

Student-Only Fee Models:

This allows students to pay a flat fee, regardless of how many sites they apply to, and regardless of the total number of sites participating in the regional match. PracticumFit is designed to be affordable for as many students as possible without sacrificing quality or system stability.

Payments are made annually by each student via major credit card as part of their initial registration on PracticumFit.com, through a secure online payment platform. Any student may withdraw from the match process and request a full refund at any time until the Rank Window Closure date.

Option 1a – Student-only Flat Fee: \$60 per student per year. No cost to Schools or Sites.

Option 1b – Student-only Flat Fee with Low Income Waiver: \$65 per student per year, with fee waivers (managed by regions or schools) available for up to 10% of the regional student count. This model is intended to allow us to better meet the needs of low-income students. No cost to Schools or Sites.

Student Fee + Site Fee Model:

If a more evenly-spread pricing model is preferable, the following alternative fee schedule for students and sites also meets PracticumFit's income needs, based on the Student and Site estimates provided by regional groups. *Sites may each have an unlimited number of tracks, opening, and administrator accounts for their annual fee. Lunchbreak Labs is not equipped to process invoices via means other than major credit card for Site users.*

Option 2 – Student/Site Flat Fee: \$40 per student per year, and \$90 per site per year, paid via major credit card by all students and all sites. No cost to Schools.

Lump Sum Model

Option 3 – Regional Invoicing: Through elimination of credit card processing fees and payment processing platform, we are able to offer a 5% fee decrease if paid in a single annual lump sum by the regional consortium prior to match posting. If a region prefers this option, please contact us to arrange pricing and payment schedule.

Pricing is valid until June 15, 2019. At least 60 days are necessary for national system setup.

All pricing models listed here assume a minimum student count participating in the national match. Should student numbers fall below 1000 match participants in a given year, PracticumFit may request an additional flat fee for service maintenance in years following, to reflect non-scaling costs, which will be negotiated at that time.

Maintenance, Monitoring and Support

PracticumFit.com will be responsible for all costs related to the ongoing hosting and maintenance of the application, provided that each region maintains at least 100 students per year through the platform, or a national network maintains at least 1200 students. If a client expects to go below these minimums, they may opt out entirely, or pay an additional flat hosting and data retention fee for that year. Additionally, during the matching process there will be an email-based support system in place to ensure that any issues are documented and resolved quickly. Automated monitoring tools will ensure PracticumFit.com staff are alerted immediately should the site go down during the matching window. New feature requests and additions will be prioritized by the PracticumFit.com developers and addressed as quickly as possible, however substantial development requests from year to year may be beyond small iterations, at which time they can be quoted and approved or rejected by the requestor.

Other Available Features of the Platform

In addition to the Site Directory hosting and Rank and Match Application included in this quote, additional platform services are developed and available upon request at additional cost. A full platform for application submission and review is available. Additionally, adjustments can be made to the matching algorithm and match process to meet the specific needs of certain groups.

Application Platform

PracticumFit can offer an application submission platform to allow students to upload application materials to a secure server, have them reviewed and approved by their program administrators, collect letters of recommendation, and submit applications to externship tracks they are interested in. Site administrators and applicant reviewers can download and view the materials, make comments, and view contact information for students to arrange interviews.

Letters of Recommendation

Students may submit requests for Letters of Recommendation (LoR) to other individuals via an email form.

Once a student has sent a request for a letter of recommendation, the recipient will be directed to a unique page with a document upload form. Recipients will not need to fill out any additional information or specify which student they are submitting a letter for, and will not need to create an account. Once the document has been uploaded, the student will be notified via email. The uploaded letters will not be visible to the student, only whether or not their requestor has successfully submitted them.

Program Approval

Once a student feels their materials are ready for review, they may submit a request to their program administrator(s) to review and approve their application materials. This will send an email to the administrators informing them the student is ready to have their materials reviewed.

Program administrators will have a student progress dashboard which shows which students have registered, submitted their application materials for review, successfully completed review, and how many sites they have submitted applications for.

Applicant Review and Interviews

When a student applies to an externship site, all site administrators and applicant reviewers will be notified that new student materials are available, and directed to a page to view the student's application packet. On this page there will be a basic commenting system which will only be visible to site administrators and applicant reviewers, where different members of the hiring team may make confidential notes between one another. When the team has reached a consensus, a Site Manager will indicate if the candidate is eligible for the position or not. Accepted candidates are placed on a rank-ordered list which can be edited up to the ranking deadline, and move on to the matching process.

Augmented Matching Algorithm

The PracticumFit matching algorithm used by BAPIC is an unmodified implementation of the Nobel-prize-winning Gale-Shapely algorithm and fully meets the needs of a small regional match. Some larger matches in other fields add additional logic to accommodate: matching couples to sites in similar geographical regions, sublists for Site rank orders lists to better fulfill demographic requirements and skill sets for hiring needs, and list reversions to maximally fill all tracks offered by a single site. PracticumFit can accommodate these more complex match needs for a given region or a national-scale match at a slightly increased per-user cost.

Technical Details

Hosting Infrastructure

The PracticumFit.com application is hosted on [Heroku](#) – an elastically scalable application deployment service. Heroku is backed by [Amazon Web Services \(AWS\)](#) – the largest and most trusted Platform as a Service provider in the world. AWS and Heroku allow the PracticumFit application to easily scale to meet the high-traffic periods, and automatically scale back down once the matching period is over. This results in a powerful, reliable, and secure environment without the added cost of hosting and managing the application using the consortium's internal or paid resources.

Programming Languages

The application is written in Ruby on Rails, with information stored in a separate, redundant database (PostgreSQL). This allows for a rich, standards-compliant front end interface as well as a powerful data

storage and computational backend. Rails and Postgres are all open-source technologies, eliminating the need for costly ongoing license fees. PracticumFit.com is tested against a wide range of modern browsers (Chrome, IE9+, Firefox, Safari), and most site functions are compatible with smartphone and tablet devices.

Financial Transactions and Account Security

PracticumFit.com takes account security very seriously. The entire site will be encrypted with 128-bit SSL, ensuring secure communication between the core application and individual users. Since the site will conduct financial transactions, it will do so using a 3rd party payment processor ([Stripe.com](https://stripe.com)). This allows students to securely pay their access fees without PracticumFit.com ever actually seeing or storing their credit card information. The Stripe payment service selected by PracticumFit.com is fully PCI-compliant and based in the United States. PracticumFit.com will never receive or store credit card information for any payments processed through the platform.

Business Continuity Guarantee

Should PracticumFit.com cease operations, CAPIC may, at its discretion, elect to take over management and support of the existing application, with the full endorsement of PracticumFit.com. Source code, tests, and documentation will be held at [GitHub.com](https://github.com), a 3rd party repository. This would allow regions to host their own version of the application independent of PracticumFit.com. Exact terms of the business continuity clause will be negotiated at a later date.

Who We Are

Brad Hubbard

<http://bradhubbard.net>

Seasoned Product Manager and Consulting Software Engineer – Brad Hubbard has worked with a wide range of clients, and brings development and product definition skills from a diverse background including business process automation software. With more than 15 years in web development, Brad has a keen understanding of how to define, build, and launch products quickly and successfully.

Amorette Getty, PhD

Practicum Fit General Manager – Amorette boasts a long-term background in the academic sector, having focused very widely on enhancing the efficiency of local, national, and international academic and research programs. She is experienced in the development of online tools and databases, using modern web tools to connect students, educators, researchers, and non-academic partners, allowing them to work together to find and fully access collaborative resources.