

UNIVERSITY of
HOUSTON

YOU ARE THE PRIDE

UNIVERSITY INFORMATION TECHNOLOGY

Implement Secure Digital Signatures

January 19, 2012

Implement Secure Digital Signatures: Overview

➤ **Major initiative for UH & UIT for FY 2011/12**

“Digital Signature Project (\$247,500); The Digital Signature Project will make possible electronic authorization of official university business (e.g., purchasing, travel, leave requests). Eliminating the need for print signatures will increase operational efficiency and reduce the university’s reliance on, and investments in, paper. “

– Fiscal Year 2011 Plan and Budget

➤ **What is a Digital Signature?**

E-signatures are divided into two categories:

1. **Electronic signatures** - click and sign (i.e. type name); simple authentication
2. **Digital signatures** - utilizes public-key cryptography (PKC) / public-key infrastructure (PKI); complex algorithms using SSL certificates.

Implement Secure Digital Signatures: Objectives

- More efficient business processes
 - Electronic authorization of official university business
(e.g., on-line contracts, purchasing, travel, leave requests)
- Increased operational efficiency and reduced reliance on, and investments in, paper and other related expenses of printing
- Strong security for documents and messages where the identity of an author, sender, or the contents of a message must be verified and validated, or authenticated
- Legislative compliance with the Texas Administrative Code (TAC) and the Texas Department of Information Resources (TxDIR)

Implement Secure Digital Signatures: UHS Project Team

Project Manager: Mike Mantell (UIT), Technical Lead: Brian Walker (UIT)

UH Business Representatives:

- ❖ Administration & Finance, Office of the General Counsel, Purchasing, UIT

UHS – Business and IT Representatives from each campus

- ❖ UH Downtown: George Anderson & Erin Mayer
- ❖ UH Clear Lake: Cathy Bye & Margaret Lampton
- ❖ UH Victoria: Vangie Kolesar & Eric Mims

Implement Secure Digital Signatures: Compliance Requirements

State of Texas Requirements incumbent upon UH:

- Offeror must utilize certificates for digitally signed communications obtained from a **source(s) approved as an acceptable PKI service provider** by the Texas Department of Information Resources (DIR)
- Texas Government Code § 2054.060 - Digital Signature
- TAC §202.75.2.E, Information Resources Security Safeguards
- TAC §203.25 – Acceptable PKI Service Provider
- TAC §203.44 - Acceptable Digital Signature Technology

Implement Secure Digital Signatures

➤ Forsythe Technologies Proposal

- Consortium of Forsythe, SIGNiX & Symantec/Verisign
- Multi-Solution Approach
 - Certificate based – VeriSign MPKI – Internal solution
 - Non-certificate - SIGNiX – External solution
 - Customers:
 - Houston Area Realtors
 - Credit Unions
 - Universities (Penn State)

UH BUDGET IMPLICATIONS

Implement Secure Digital Signatures: Proposal

- 3 Year Contract Invoiced Annually - \$240,037.50
 - Out-years subject to availability of funds
- Licenses included for:
 - Verisign/Symantec MPKI (Internal Solution)
 - 5000 User Seats (Faculty/Staff)
 - 2 Administrators
 - SIGNiX (External Solution)
 - 10,000 External Signers (Students/Parents/Alumni)
 - 50 Faculty/Staff users/admins
 - Annual Maintenance

Implement Secure Digital Signatures: Proposal

- Discounted Pricing for Additional SIGNiX Licenses:
 - Minimum 50 Seats – users/admins
 - 50 = \$15,000
 - >100 = \$275
 - >250 = \$250
 - >500 = \$225
 - >1,000 = \$200
 - >3,000 = \$175

Implement Secure Digital Signatures: Proposal

➤ Discounted Pricing for Additional SIGNiX Licenses:

External Signers (Students/Parents/Alumni)

Annual Price/Signer - Minimum 10,000 Signers

10,000 = \$25,000

>10,000 = \$2.35

>30,000 = \$2.00

Implement Secure Digital Signatures: Proposal

SIGNiX Optional Services:

Authentication Options: Charge/Attempt

1. Internal Click-thru: No Charge
2. Authentication w/Question(s) created by Authorized User: No Charge
3. SMS Text Shared Secret: \$0.25/attempt
4. Basic Authentication with SSN & DOB entered and validated with outside 3rd party data provider: \$1.00/attempt
5. Full Knowledge-Based Authentication (KBA): \$2.50/attempt

Implement Secure Digital Signatures: Proposal

- Professional Services Fees (Not anticipated at this time):
 - Senior Assets - \$150/hour
 - Project Management - \$150/hour
 - QA/Development - \$150/hour
 - 4 hour minimum

Implement Secure Digital Signatures: Next Steps

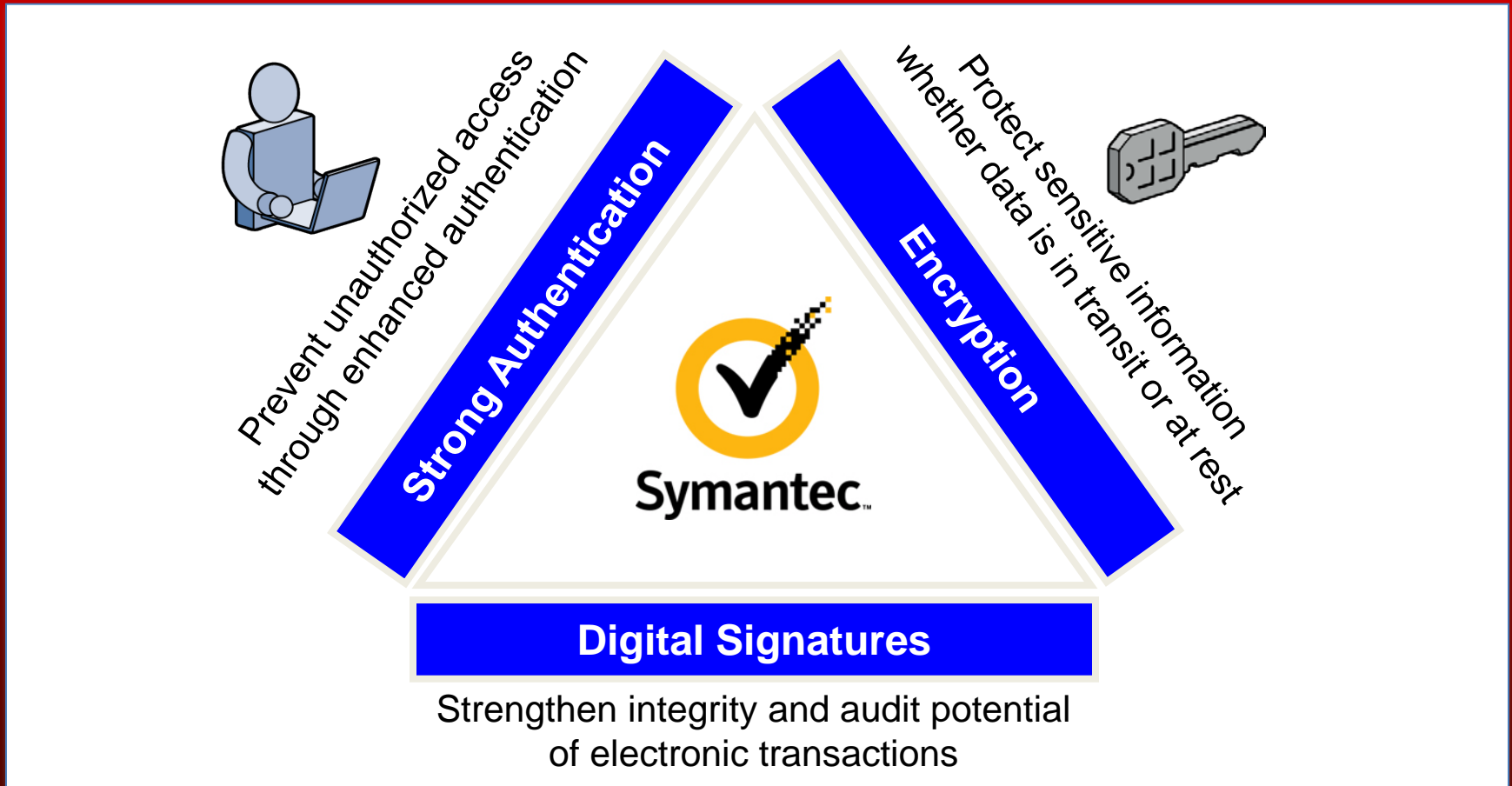
- Initial RLH implementation:
 - Implementation of Resident agreement
 - Follow-on with Meal Plan, FERPA, other RLH documents

- Implementation for other campus departments
 - Marketing: Publicity Releases
 - Purchasing: Sole Source Justifications
 - Property Management: Off-Campus Property Forms

- Development of campus-wide deployment plan
 - Leverage of other included services: encrypted email, etc.

The Solution

Highlights of what this vendor delivers



Public Key Infrastructure

SIGNiX serves major enterprises directly and also through integration with leading technology partners, combining their industry applications and document solutions with our digital signature technology and know-how. Our clients benefit from superior trust and security as well as legally compliant solutions that are customer proven and market tested by:

- ✓ Accelerating the signing process
- ✓ Reducing operating costs
- ✓ Growing revenues

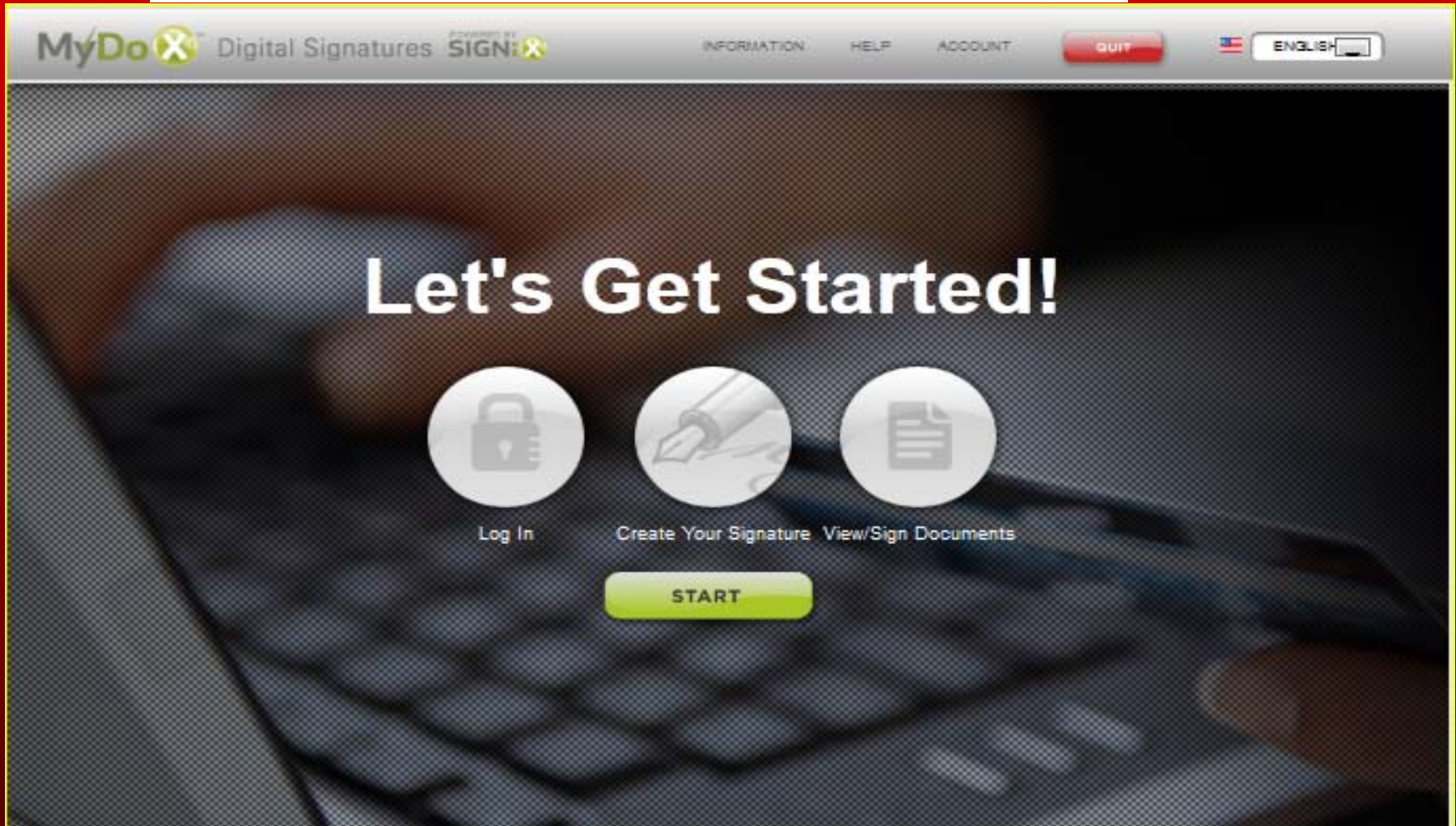
Customers	Partners
   	   
   	   
   	  
   	   
	  

Everything you need to deliver a comprehensive solution to your customer:

- 1 Securely Deliver Documents
- 2 Capture E-Consent
- 3 Provide Real Time Identity Authentication
- 4 Issue and Manage Digital Certificates
- 5 Present Documents for Signature
- 6 Capture Signature Ceremony
- 7 Time Stamp the Transaction
- 8 Support Process Workflow
- 9 Provide a Complete Audit Trail/Event Log
- 10 Communicate with All Signers
- 11 Provide Tools for Corporate Administration
- 12 Support Legal Non-Repudiation



MyDoX	EnterpriseDoX	AllDoX[∞]
<p>STAND ALONE Digital Signatures MyDoX is ideal for a smaller number of documents to be signed with simple manual preparation of each document /transaction.</p>	<p>INTEGRATED Digital Signatures EnterpriseDoX is a system to system solution with all document and transaction preparation done automatically, eliminating all manual preparation.</p>	<p>INTEGRATEDPLUS Digital Signatures AllDoX leverages the functionality and benefits of both MyDoX and EnterpriseDoX for total flexibility in preparing and executing documents.</p>
Any document accessible from your PC	Seamless integration to document platform	Flexibility to add documents to integrated solution
Ad hoc e-signature needs	No user preparation of documents	Deploy for low volume applications
Simple deployment with no integration	Higher degree of control	No software needed to make documents signature ready
Use templates to improve efficiency	Standardized deployment	



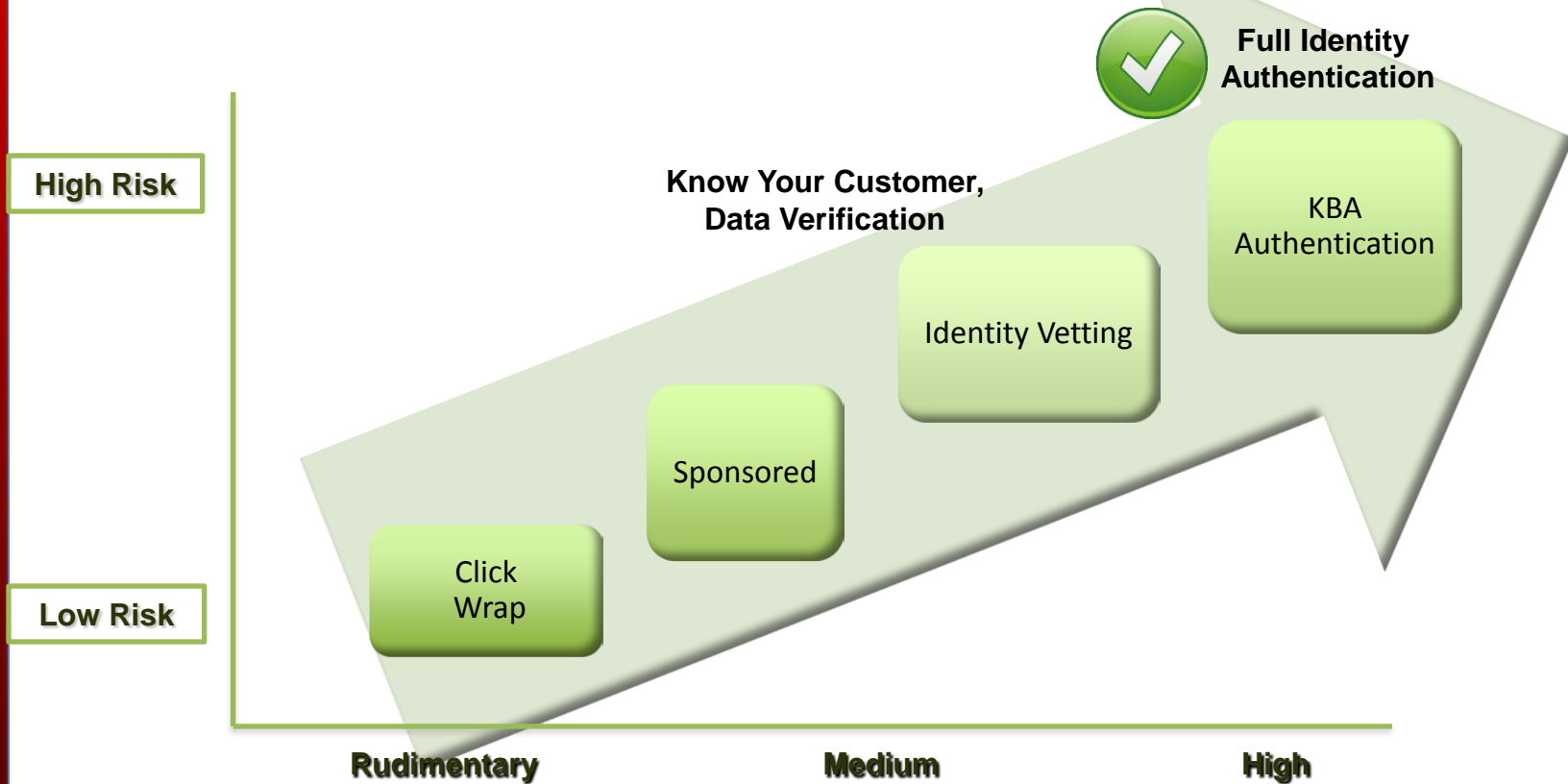
Immediate Signing of Residence Agreement



The screenshot shows the MyDoX Digital Signatures interface. At the top, there are navigation links for INFORMATION, HELP, ACCOUNT, and a QUIT button. A language dropdown menu is set to ENGLISH. The main content area is titled "E-Sign Consent" and includes the following text: "For your security, we'll need to verify your identity before you get started. Please enter your information below to begin the log in process. A Shared Secret Code has automatically been sent via text message to your mobile device." Below this text is a "Read Legal Consent" button. The consent status is shown as "Agree to Legal Consent?" with a radio button for "decline" and a checked radio button for "accept". A text input field contains the code "CGCJ82" with a note "(Shared Secret Code Is Case Sensitive)". A "RESEND CODE" button is located below the input field. A "Next" button is positioned at the bottom right of the consent form. At the bottom of the page, there are three main navigation buttons: "LOG IN" (with a padlock icon), "CREATE YOUR SIGNATURE" (with a pen icon), and "VIEW / SIGN DOCUMENTS" (with a document icon).

Immediate Signing of Residence Agreement

Your documents have different levels of risk attached to them.
The higher the risk, the more protection is available to achieve the reward.

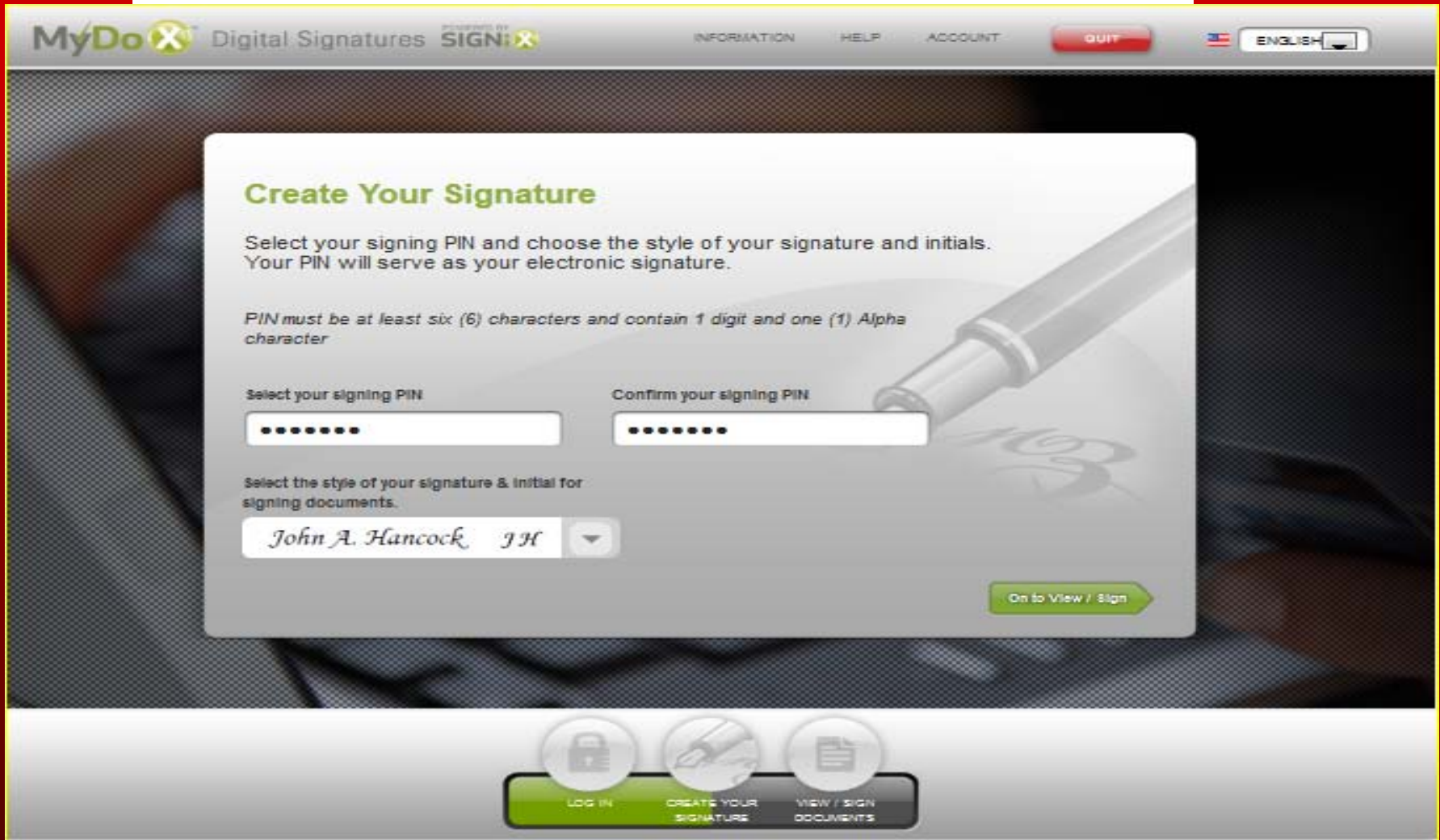



Implement Secure Digital Signatures: Proposal

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4. Basic Authentication with SSN & DOB entered and validated with outside 3rd party data provider: \$1.00/attempt
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MyDoX Digital Signatures POWERED BY SIGNiX INFORMATION HELP ACCOUNT [QUIT](#)  ENGLISH

Create Your Signature

Select your signing PIN and choose the style of your signature and initials. Your PIN will serve as your electronic signature.




PIN must be at least six (6) characters and contain 1 digit and one (1) Alpha character

Select your signing PIN Confirm your signing PIN

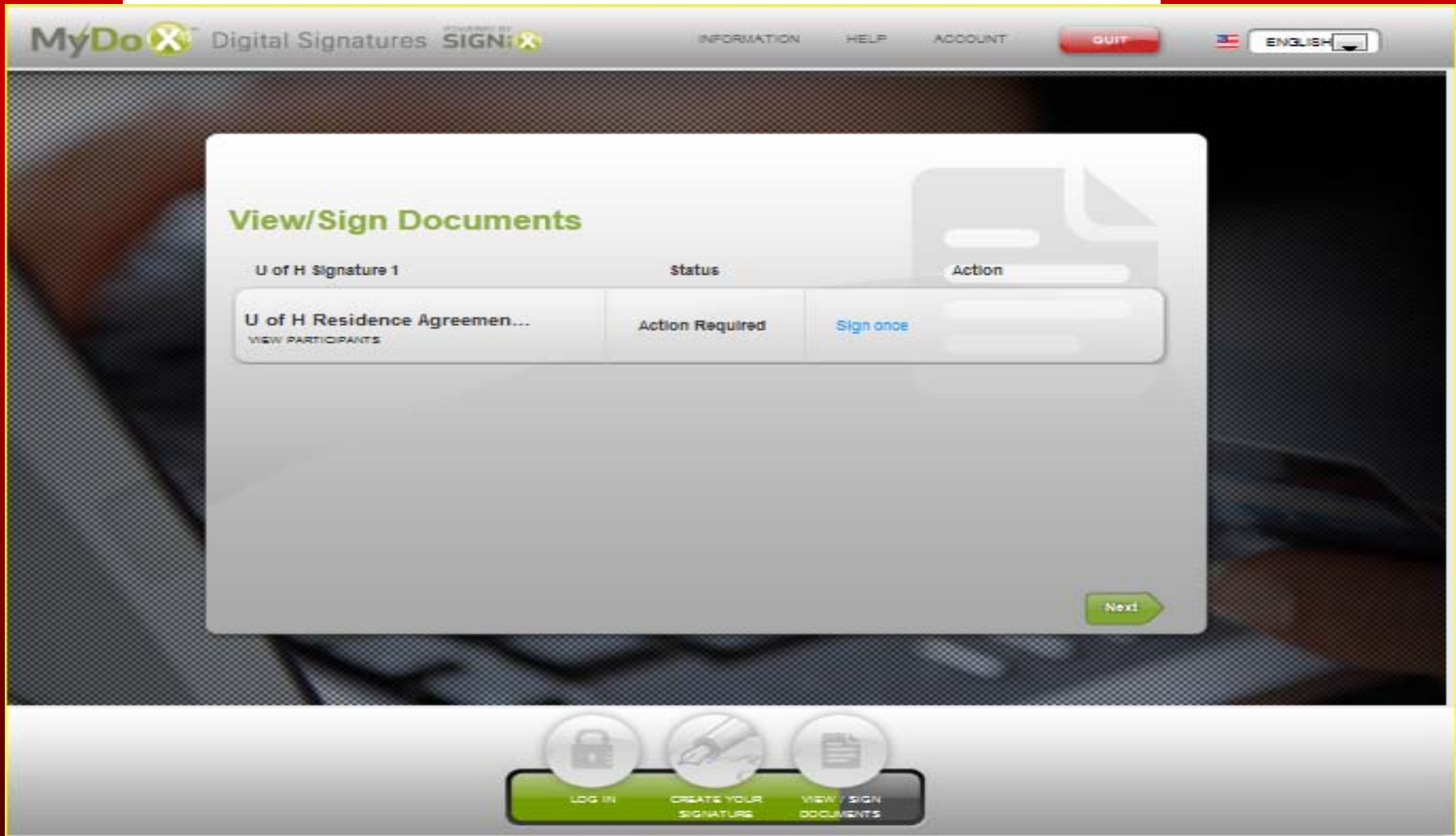
Select the style of your signature & Initial for signing documents.

John A. Hancock *JH*

[On to View / Sign](#)

 LOG IN  CREATE YOUR SIGNATURE  VIEW / SIGN DOCUMENTS

Immediate Signing of Residence Agreement



The screenshot shows the MyDoX Digital Signatures interface, powered by SIGNiX. The top navigation bar includes links for INFORMATION, HELP, ACCOUNT, and a GUIT button. A language dropdown menu is set to ENGLISH. The main content area is titled "View/Sign Documents" and displays a table with the following data:

U of H Signature 1	Status	Action
U of H Residence Agreemen... <small>VIEW PARTICIPANTS</small>	Action Required	Sign once

A "Next" button is located at the bottom right of the table. At the bottom of the interface, there are three main navigation buttons: LOG IN (with a lock icon), CREATE YOUR SIGNATURE (with a pen icon), and VIEW / SIGN DOCUMENTS (with a document icon).

Immediate Signing of Residence Agreement

MyDoX Digital Signatures POWERED BY SIGNiX INFORMATION HELP ACCOUNT QUIT ENGLISH

DOCUMENT TITLE: **U of H Residence Agreement** cancel

Action: Sign once

Click the <Tab> key to go directly to the next signature or initials on this document.

1

information on payments and section five (5) for information on Termination of Agreement.

This Agreement is legal and binding for the period set forth in this Agreement and is in effect when University receives the Deposit and an executed copy of this Agreement.

Student represents to University and University does rely herein that Student is eighteen (18) years of age or older at the time this Agreement is executed. If Student is under the age of eighteen (18) years, then one of Student's parents or legal guardians has signed this Agreement and that person is hereby made a party to this Agreement, subject to the Terms and Conditions attached to this Agreement.

Student's occupancy is governed by the regulations set forth in the University of Houston's "Residence Halls Service Agreement Terms and Conditions", which are incorporated herein, and the "Housing Guide" and "University of Houston's Student Handbook", which are provided at the beginning of the semester, or viewed on line, or upon request, as now written or as may be amended from time to time by the Board of Regents. **Student acknowledges by his/her signature below and by initialing each page, receiving the University of Houston "Residence Halls Service Agreement Terms and Conditions" provided within this Agreement, and he/she agrees to abide by them.**

"State law requires that you be informed of the following: (1) with few exceptions, you are entitled on request to be informed about the information University collects about you by use of this form; (2) under sections 552.021 and 552.023 of the Government Code, you are entitled to receive and review the information; and (3) under section 559.004 of the Government Code, you are entitled to have University correct information about you that is

[Click Here to Sign](#) SIGNED DATE

Student Signature	Date	Parent/Guardian Signature	Date
Student ID #: 123-456-789		Name: New Parent	

Return or mail your Residence Halls Service Agreement to:
UH Housing Services
4361 Wheeler, Room 108
Houston, TX 77004
Note: Modification of this Form requires approval of OGC
Office of the General Counsel
Residence Halls Service Agreement
OGC-S-2000-06 Revised 02.3.11
Page 1 of 8

LOG IN CREATE YOUR SIGNATURE VIEW / SIGN DOCUMENTS

Immediate Signing of Residence Agreement

MyDoX Digital Signatures POWERED BY SIGNiX INFORMATION HELP ACCOUNT QUIT ENGLISH

DOCUMENT TITLE
U of H Residence Agreement cancel

Action : Sign once

Click the <Tab> key to go directly to the next signature or initials on this document.

Intent to Sign

Enter your PIN to acknowledge viewing

I am New Student and I agree to be legally bound by this electronic signature.

Sign

information r
This Agreee
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[Click Here to Sign](#) SIGNED DATE

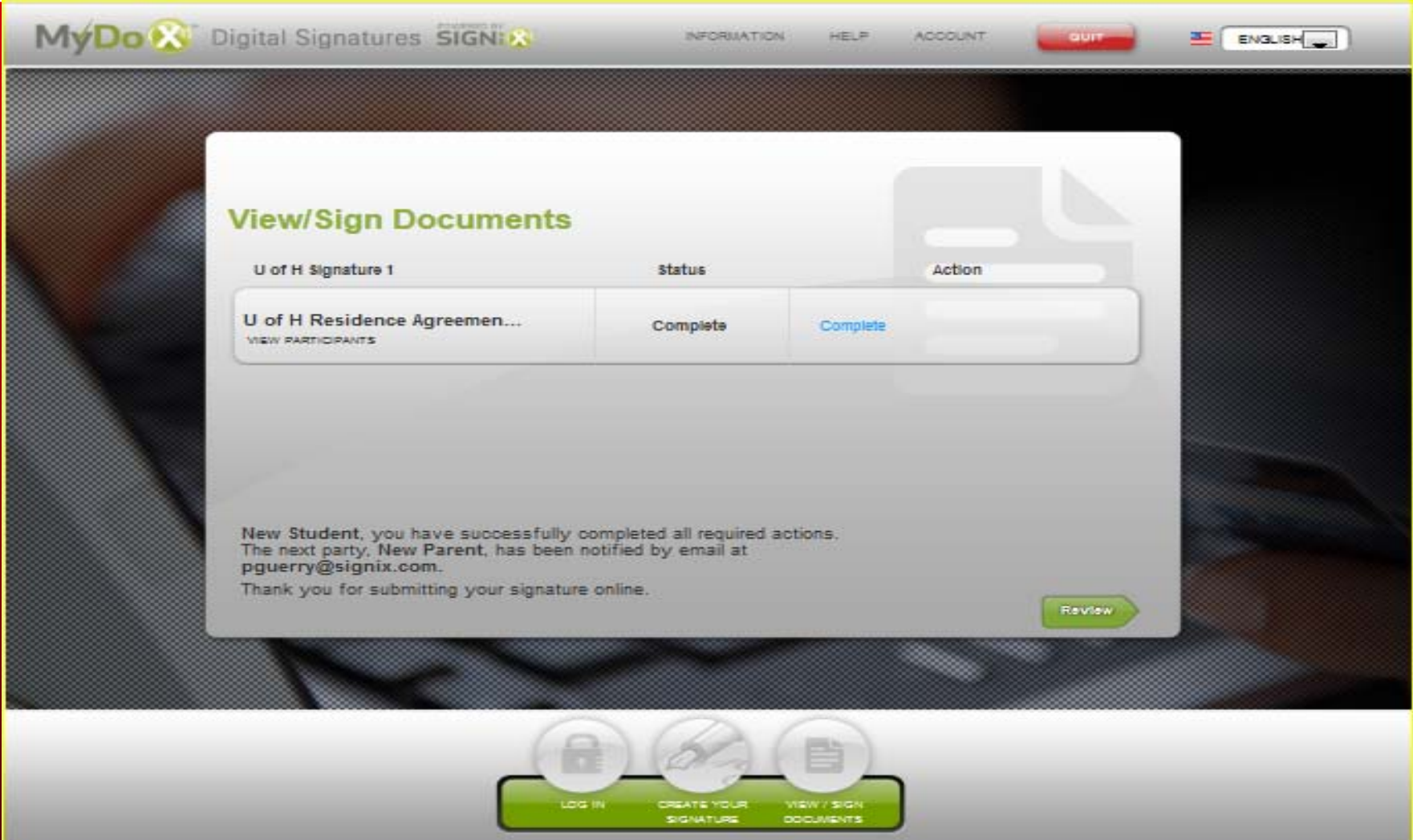
of Agreement.
d is in effect when University
hteen (18) years of age or older
) years, then one of Student's
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of Houston's "Residence Halls
nd the "Housing Guide" and
of the semester, or viewed on
he Board of Regents. **Student**
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this Agreement, and he/she
ns, you are entitled on request
orm; (2) under sections 552.021
the information; and (3) under



Student Signature	Date	Parent/Guardian Signature	Date
Student ID #:123-456-789		Name: New Parent	

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LOG IN **CREATE YOUR SIGNATURE** **VIEW / SIGN DOCUMENTS**

Immediate Signing of Residence Agreement






MyDoX Digital Signatures POWERED BY SIGNiX INFORMATION HELP ACCOUNT **QUIT**  ENGLISH 

View/Sign Documents

U of H Signature 1	status	Action
U of H Residence Agreemen... <small>VIEW PARTICIPANTS</small>	Complete	Complete

New Student, you have successfully completed all required actions.
The next party, New Parent, has been notified by email at pquerry@signix.com.
Thank you for submitting your signature online.

[Review](#)

LOG IN CREATE YOUR SIGNATURE VIEW / SIGN DOCUMENTS

Immediate Signing of Residence Agreement

MyDoX Digital Signatures POWERED BY SIGNiX INFORMATION HELP ACCOUNT **QUIT** ENGLISH

DOCUMENT TITLE: **U of H Residence Agreement** Remove All Signatures Commit Signatures cancel Action: Sign only

Click the <Tab> key to go directly to the next signature or initials on this document.

1

are not allowed to live in University Housing.

Student must pay to the University a three hundred dollar (\$300) deposit (the "Deposit"), which will be used as a security deposit, as allowed by Texas law. **Under the Terms and Conditions please read section one (1) for information on payments and section five (5) for information on Termination of Agreement.**

This Agreement is legal and binding for the period set forth in this Agreement and is in effect when University receives the Deposit and an executed copy of this Agreement.

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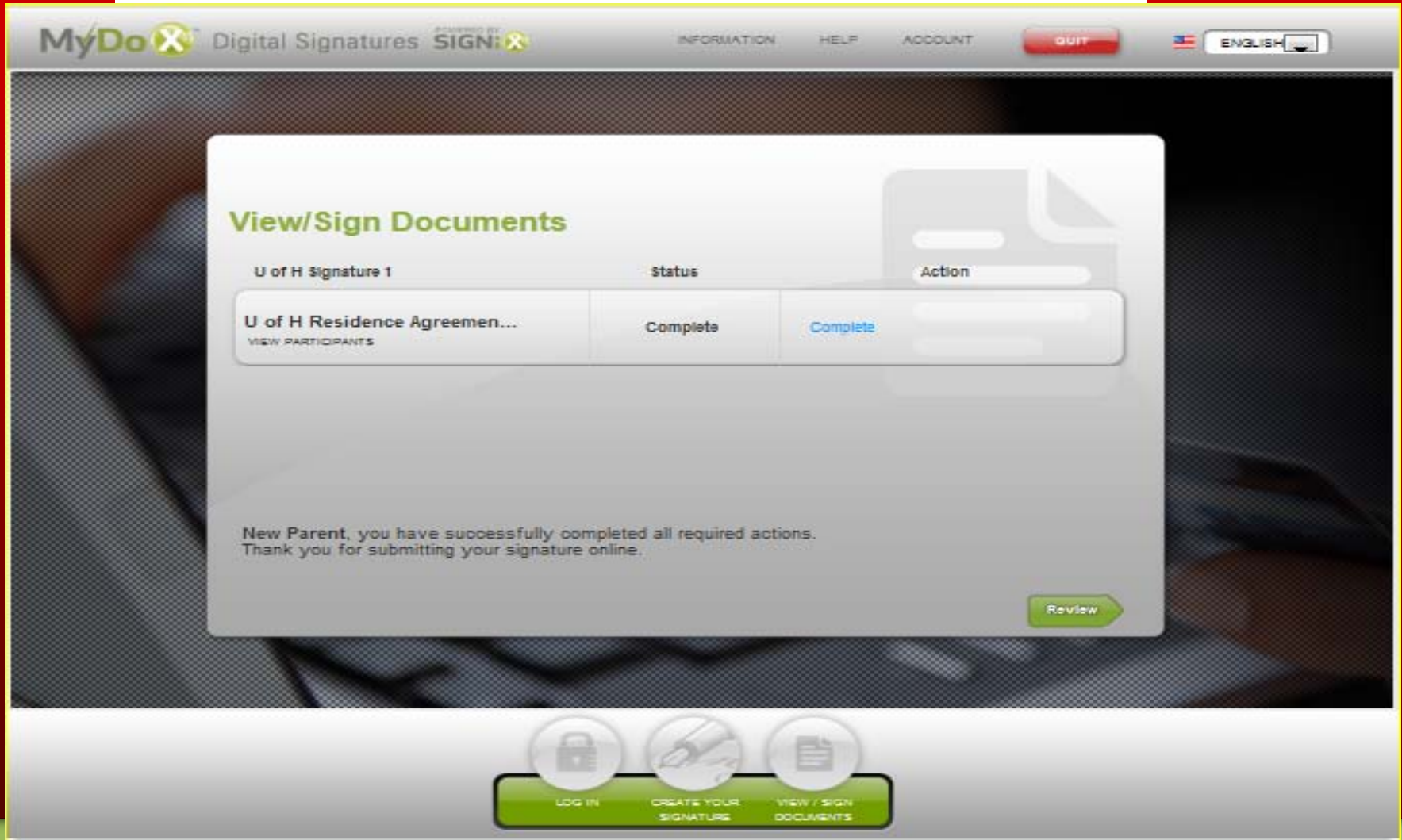
2011-12-20 17:11 EST Click Here to Sign SIGNED DATE

<u>New Student</u>			
Student Signature	Date	Parent/Guardian Signature	Date
Student ID #: 123-456-789		Name: New Parent	

Return or mail your Residence Halls Service Agreement to:
UH Housing Services
4361 Wheeler, Room 108
Houston, TX 77004
Note: Modification of this Form requires approval of OGC
Office of the General Counsel
Residence Halls Service Agreement

LOG IN CREATE YOUR SIGNATURE VIEW / SIGN DOCUMENTS

Immediate Signing of Residence Agreement



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U of H Signature 1	Status	Action
U of H Residence Agreemen... <small>VIEW PARTICIPANTS</small>	Complete	Complete

Below the table, a message reads: 'New Parent, you have successfully completed all required actions. Thank you for submitting your signature online.' A 'Review' button is located at the bottom right of the message box. At the bottom of the interface, there are three icons: a padlock for 'LOG IN', a pen for 'CREATE YOUR SIGNATURE', and a document for 'VIEW / SIGN DOCUMENTS'.


Immediate Signing of Residence Agreement

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New Student 

2011-12-20 17:11 EST

New Parent 

2011-12-20 17:15 EST

Student Signature Date
Student ID #: 123-456-789

Parent/Guardian Signature Date
Name: New Parent

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Page 1 of 8

Questions?