Shaping the Future
'JCL Samples for Beginners'

Mainframe Simplification Initiative

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NaSPA
NY Metro Chapter
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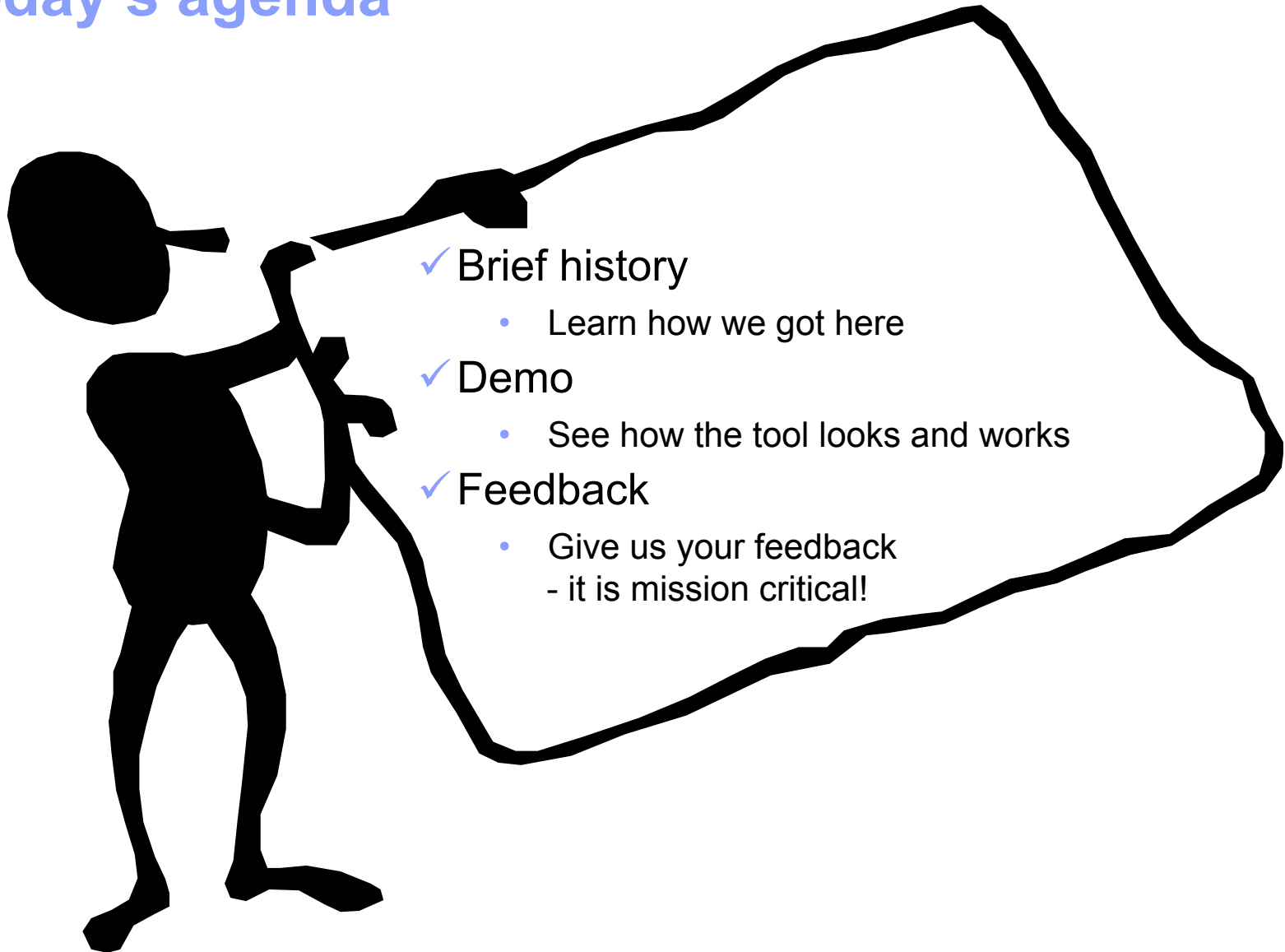
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Today's agenda

✓ Brief history

 • Learn how we got here

✓ Demo

 • See how the tool looks and works

✓ Feedback

 • Give us your feedback
   - it is mission critical!

How we got started. . .

- **What is the Mainframe Simplification effort?**
  - A major design initiative to improve the total user experience of z/OS
    - Includes information, education, user interfaces, and tools to make it easier to learn a new task on z/OS and to simplify managing z/OS.
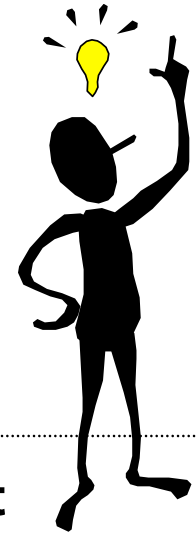
- **The *z/OS basic skills information center* is a key component of this initiative**
  - Intended to provide on-the-job training for staff new to z/OS
  - Based on the IBM Redbooks, Introduction to the New Mainframe ("z/OS Basics" and "Networking Basics")
  - Includes articles, short courses, and. . .

    the reusable JCL collection!

The challenge

New and existing users of z/OS are frustrated by the complexity of job control language (JCL), which is a set of statements that z/OS professionals use to define work to be done by the operating system.

In our work with customers we have heard. . . eliminating JCL or reducing its complexity is a recurrent, high-priority request.

Our response

To create an educational tool that teaches JCL as novice z/OS users accomplish real work.

JCL Samples for Beginners will be a free-of-charge, Web-based tool.
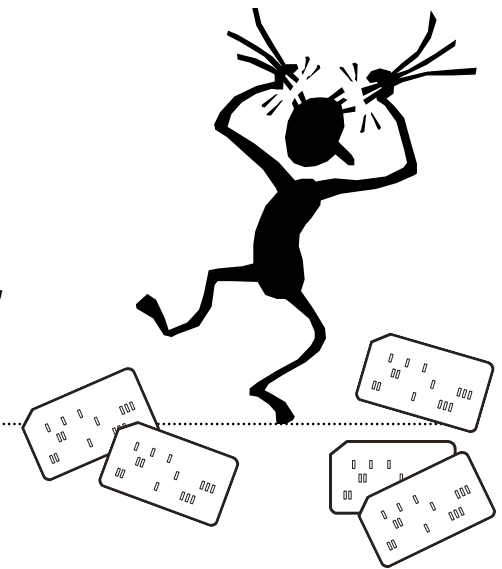
Our speed team: Summer 2008

Christopher Baran

SUNY Potsdam / BA in Computer and Information Sciences

Tammy Greene

University of Michigan / MS in HCI and Incentive-Centered Design

Chelsea Shorte

University of Virginia / BS in Computer Engineering

Mentors from the *z/OS Basic Skills Information Center* project:

Geoff Smith
UT strategist and
project lead
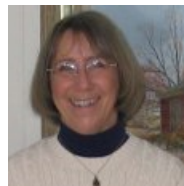
Linda Jorgensen
UCD/UX lead

Amy Lander
Information developer

Key features of the design

The *JCL Samples for Beginners*:

- ✓ Provides JCL samples for common tasks that system programmers or application developers are expected to do in their first months on the job

- ✓ Uses "interview" style, using everyday language, to help users modify the JCL samples

- ✓ Equates z/OS-specific terms with Windows / UNIX equivalents, when possible

- ✓ Teaches by showing JCL as it is generated in response to user input

- ✓ Enables users to submit jobs directly to z/OS, and to store generated JCL

- ✓ Provides links to additional information related to the task

Key implementation & delivery features

Required software on user's
workstation:

✓Internet browser

Required software on z/OS:

✓PHP for z/OS feature

✓Apache or IBM HTTP server
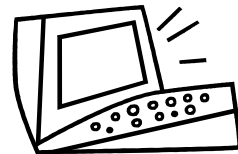
Runs on z/OS!
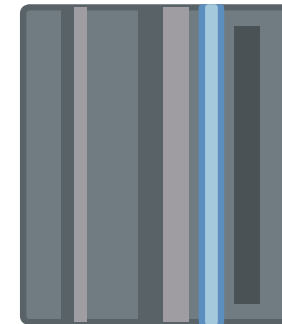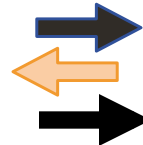
z/OS server

The flow:

1. User completes questions that are presented through browser
2. App server responds to request with JCL syntax
3. User submits JCL to z/OS through FTP

Our approach: Lean and Agile

What is **Agile** Software Development?

Agile is the use of continuous stakeholder feedback to produce high quality consumable code through use cases (or user stories) and a series of short, time-boxed iterations (or sprints).

We used Agile methodologies to:

- ✓ Develop a **product vision** and **user stories** to keep the focus on the users' perspective

- ✓ Conduct daily **scrum meetings** to ensure communication / progress

- ✓ Review **sprint** progress

  - ➢ We held planning sessions and reviews for each sprint, as well as Web conferences to review results with our clients.
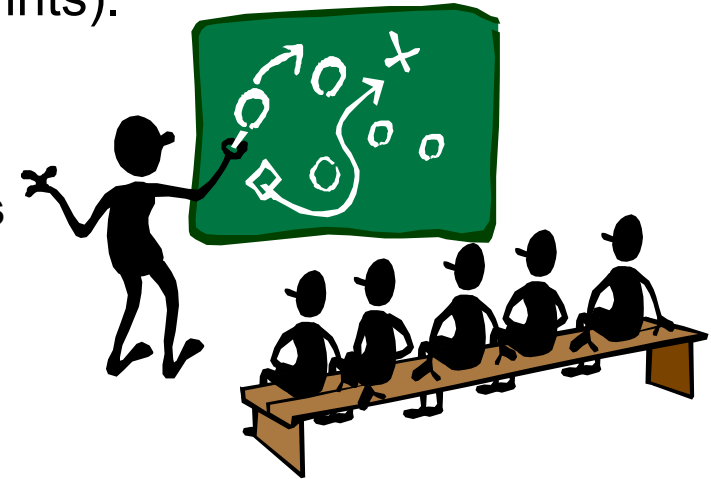
Our approach: Collaboration with clients

- **Our core stakeholders team consists of**
  - ✓ **5 customers from 5 companies**
  - ✓ **3 IBM z/OS novices (less than 5 years experience)**

- **This collaboration is critical to ensure that the iterative process works well**

- **Results in a tool that meets users' needs and expectations**
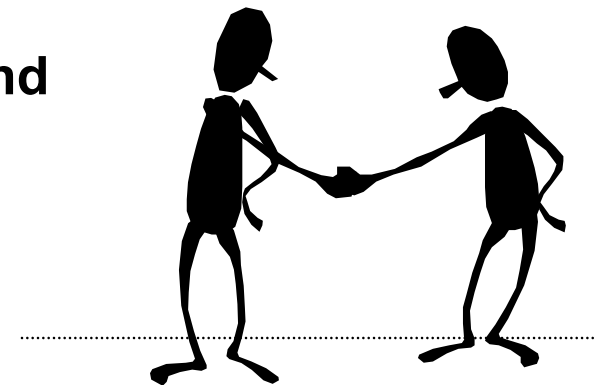
Thank you!

Speed team 2008: Client meetings and results

- **We held 8 meetings with stakeholders from June - August, 2008**
  Results:
  - ✓ Outlined the development and deployment strategy
  - ✓ Brainstormed initial prototype ideas, features and functionality
  - ✓ Confirmed the direction for the prototype design
  - ✓ Produced a feature wish list
  - ✓ Finalized the design of the tool
- Additional communication via email
  - ✓ Design updates and related feedback
- Resumed our post-Speed Team sprints in September
  - ✓ Held Sprint Review 4 in November
    - ✓ Focused on design and security issues
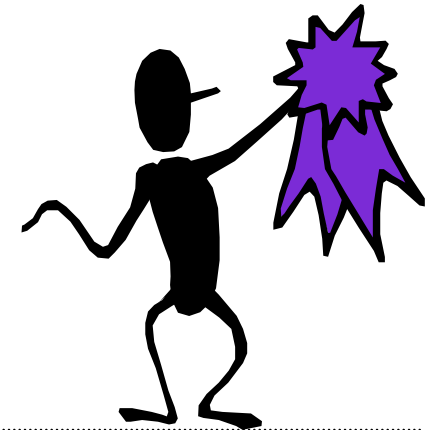
Good job!

How collaboration influenced our UI design…

- JCL search and selection

- JCL/Form frame placement

- Toolbar placement

- JCL sample categories
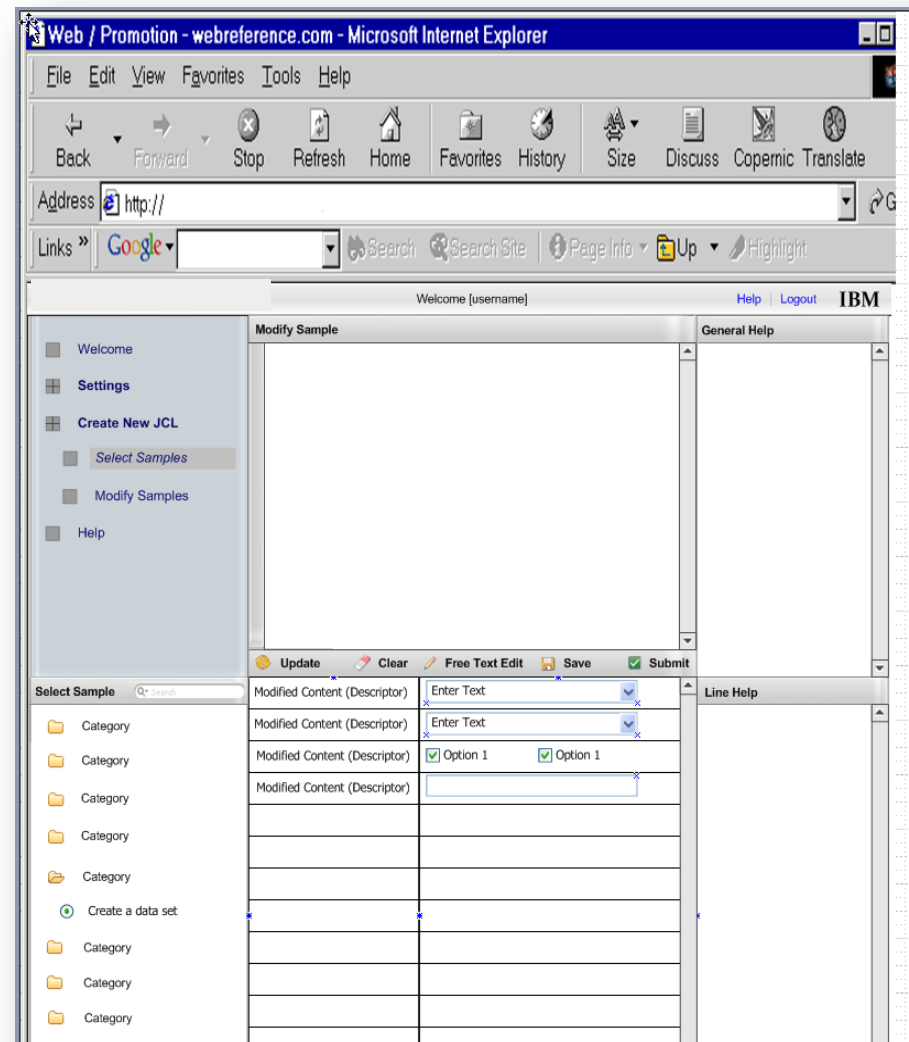
Where are we today?

- The interns returned to their studies in August
- Members of the *z/OS basic skills information center* team have stepped in to fill the gaps
  - Ron Van Buskirk and Toshiba Burns-Johnson are completing our code

  - Chris Hastings is writing the Help material and Jim Guilianelli is editing our content

  - We've recruited technical experts to help with security issues, and to identify common errors/fixes for each JCL sample
- We have continued using the Agile process. . .
  that means "a usable deliverable" at the end of each sprint (iteration)
- We're now working on sprint 10

What have we accomplished?
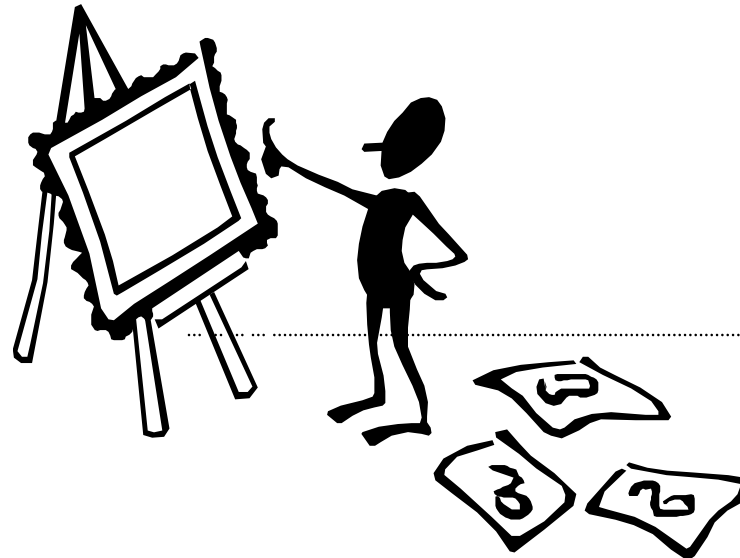
Let's take a look. . .

How can you help?

- We need your feedback TODAY… Questions to start the discussion:
  - What type of JCL education does your company for new people?
  - Would you use the JCL Samples tool if it was installed at your company?

- We're also looking for a few more stakeholders (this person **must** attend sprint reviews)

  - ✓ Give your contact info to Geoff
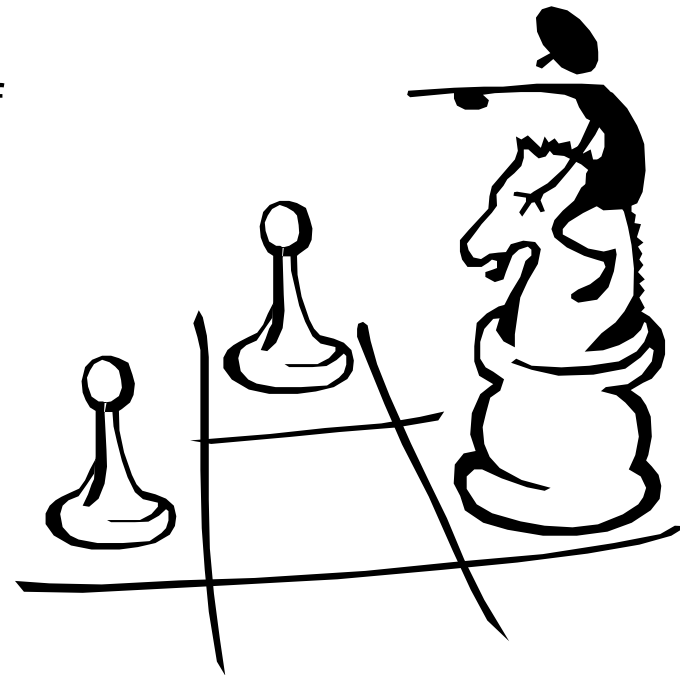
Thank you and stay in touch. . .

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Geoff Smith, z/OS Basic Skills Information Center project manager:
gksmith@us.ibm.com

Amy Lander, z/OS Basic Skills Information Center developer:
lander@us.ibm.com

And don't forget the Contact z/OS button on the *z/OS basic skills information center's* left navigation bar:

http://publib.boulder.ibm.com/infocenter/zos/basics/index.jsp

Current build: Welcome page
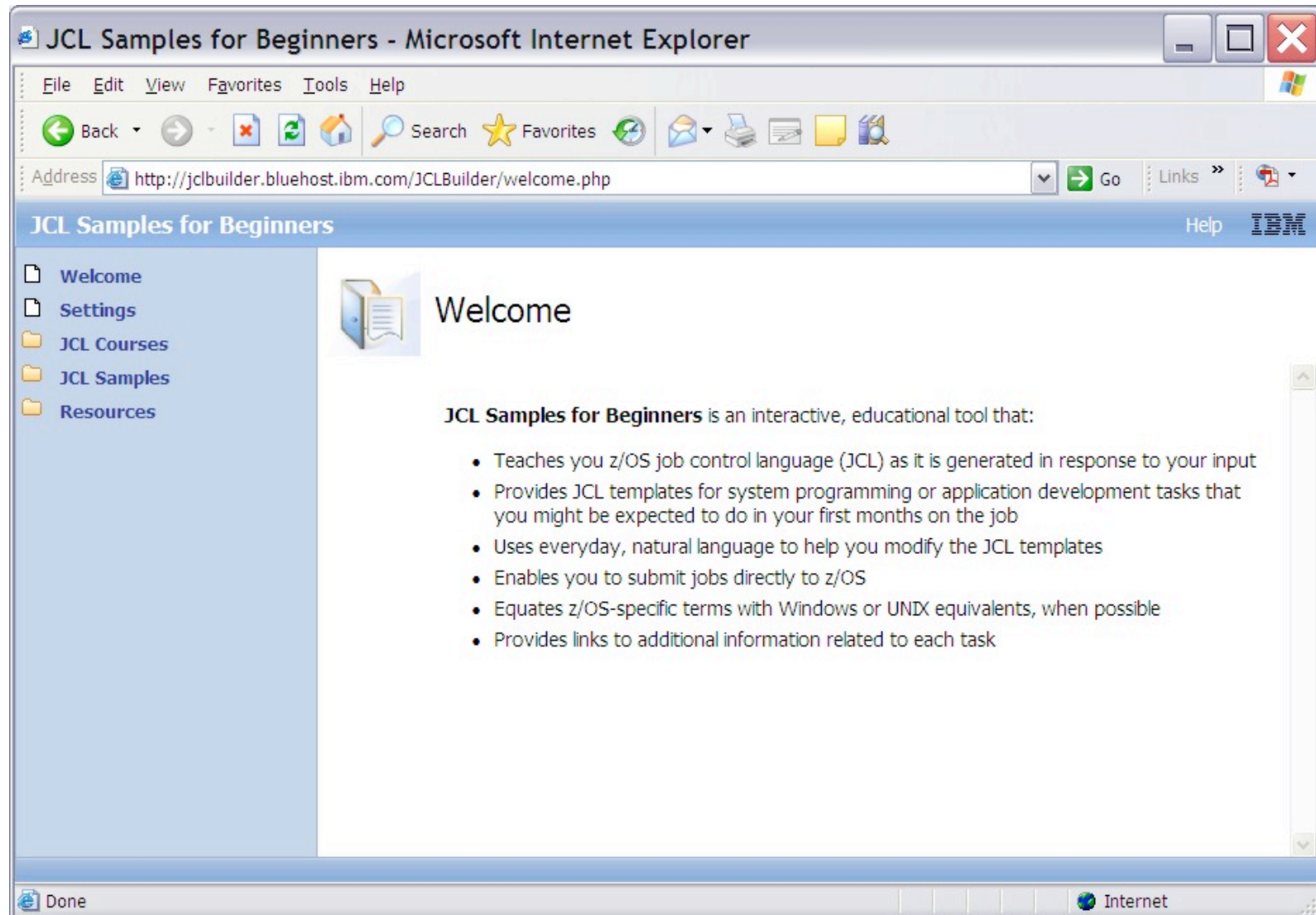
Current build: JCL Courses

Current build: Settings page

Current build: Modify Sample page

Current build: Submit modified JCL sample to z/OS

Current build: Submitted job results

Prototype UI: Log-in and landing pages
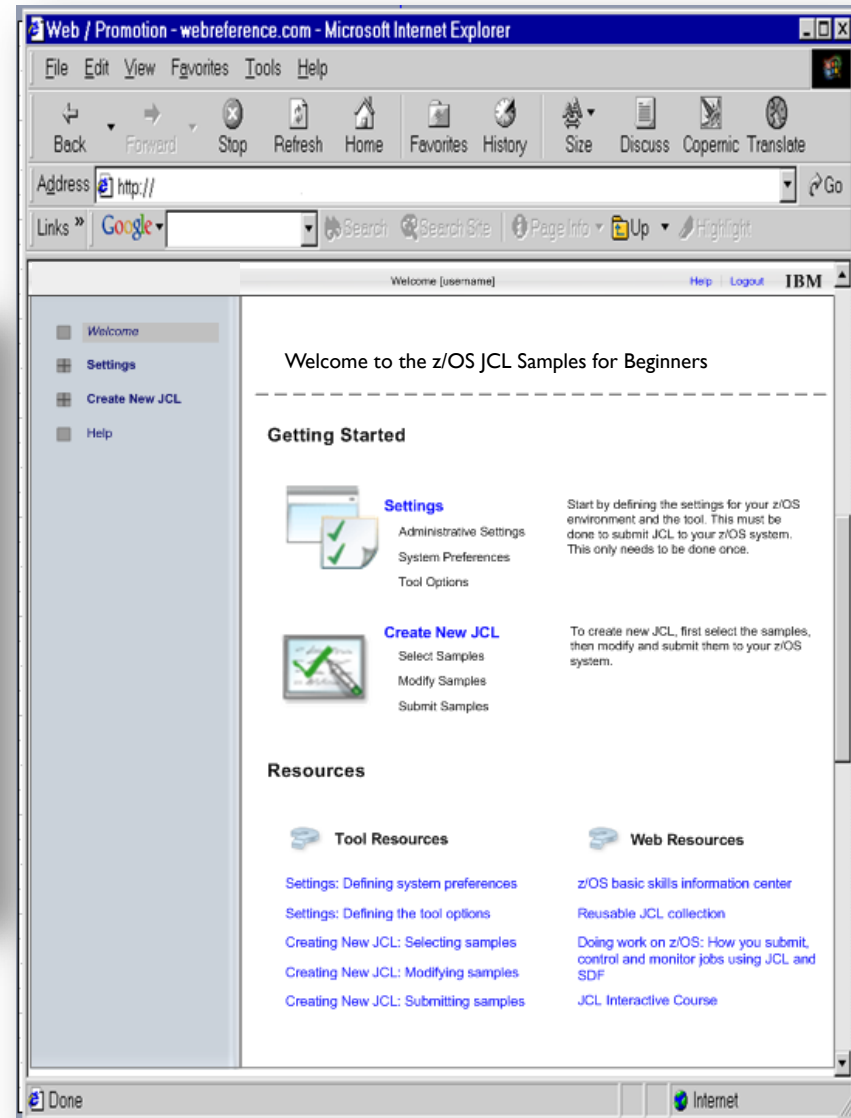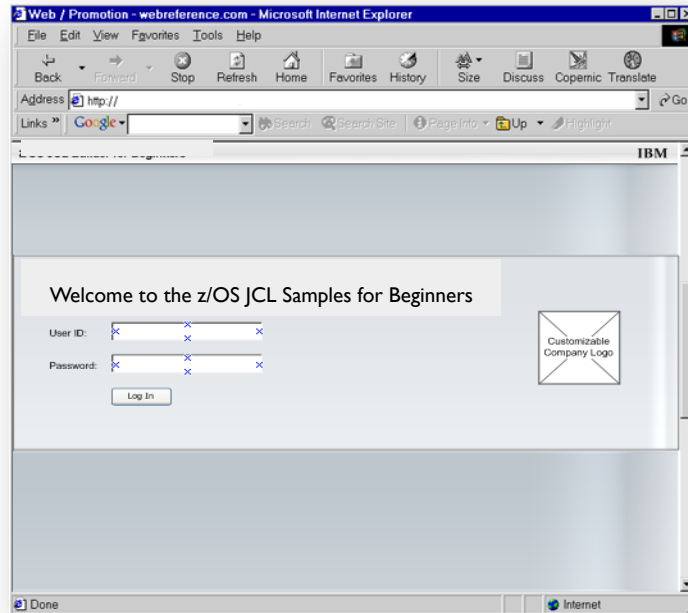
Prototype UI: Tool and z/OS system settings

Prototype UI:
Main page