Documentation Changes

Chapel Team, Cray Inc.
Chapel version 1.17
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Outline

- **Website Migration**
- **Finding the Latest Version of Documentation**
- **Example Code Changes**
- **Other Documentation Changes**
Website Migration

Migration to chapel-lang.org

Background:
- Chapel has traditionally been hosted at http://chapel.cray.com
- Reflected its Cray-based heritage

This Effort:
- Migrated the site to https://chapel-lang.org
- Uses a more traditional URL for an open-source language effort
- Switched to https to avoid warnings for submitted doc search queries
- Set up forwarding for a number of common aliases:
  - http://chapel.cray.com
  - http://chapel-lang.org
  - http://www.chapel-lang.org
  - https://www.chapel-lang.org
- Performance tracking also migrated:
  - from SourceForge to https://chapel-lang.org/perf-nightly.html
Migration to chapel-lang.org

Impact:
- Provides a more traditional URL for a programming language project
- Using ‘https’ provides better security, reflects best practices

Next steps:
- Move mailing lists to chapel-lang.org as well?
Finding the Latest Version of Documentation
Doc Versions: Background and This Effort

Background:
- Google searches don’t always return the latest documentation version

This Effort:
- Moved current documentation up one directory
  - from https://chapel-lang.org/docs/latest/ to https://chapel-lang.org/docs/
- Added a color-coded menu button to every documentation page
Doc Versions: Impact and Next Steps

Impact:
- Gives the user a strong visual cue for outdated or future pages
- Provides a quick way to get to the latest version of a page
  - assuming the URL is the same
  - if it’s not, jumps to documentation index page for that version (no 404s)
- Googling “Chapel documentation” now finds top-level version

Next steps: Improve search for sub-pages of documentation
Example Code Changes
(programs in $CHPL_HOME/examples)
Example Code Changes ($CHPL_HOME/examples)

- Added a faster version of reverse-complement
- Updated examples with respect to initializer changes
- Converted SSCA#2 leader-follower iterators to standalone
- Fixed a multi-trial timing bug in our implementation of ISx
- Fixed a bug in the LCALS ‘inner_prod’ loop kernel
- Removed the explicit MiniMD version from the release
Other Documentation Changes
Language Specification Changes

- **Language specification changes:**
  - Updated the function overload disambiguation rules
  - Described combining promotion and default arguments
  - Documented type arguments with type specifiers
Other Documentation Changes

- Documented the built-in Error types
- Improved documentation of ‘-f’ configuration file parsing
- Documented supported domain maps in ‘LinearAlgebra’
- Added ‘m4’ to Chapel’s prerequisites list (needed for GMP)
- Documented ‘range.size’
- Documented ‘compileline --compile-c++’
- Added missing documentation for ‘dsiAssign()’
- Updated ‘mason’ documentation to include new features
- Fixed dead links
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