

## Fall 2024 - SE PROJECT 2

Group 47

Team Members:

Gaurav Sheth ([gpsbeth@ncsu.edu](mailto:gpsbeth@ncsu.edu))

Soham Gundewar ([sgundew@ncsu.edu](mailto:sgundew@ncsu.edu))

Anish Dhage ([adhage@ncsu.edu](mailto:adhage@ncsu.edu))

Github Link-

[https://github.com/NCSU-SE-2024/PackReview\\_v3](https://github.com/NCSU-SE-2024/PackReview_v3)



PackReview

# NC State Jobs Review System

Team 47 – Gaurav Sheth, Soham Gundewar, Anish Dhage

Empowering students with insights, discussions, and community-driven reviews for a better on-campus job journey.



REPO

## What is PackReview?

PackReview is a job review application designed to enhance the job search experience by providing users a platform to share and explore job insights. It facilitates informed career decisions through user-generated reviews.

## Existing Key Features:

### User-Generated Job Reviews:

- The platform allows users to contribute reviews, creating a rich database of experiences that inform prospective applicants.

### Comprehensive Job Search and Filtering:

- Users can refine job searches using specific filters by search and company ensuring they find the most relevant reviews.

### Optimized Performance with Pagination:

- Pagination strategies ensure efficient data loading and browsing, minimizing server load and enhancing user experience.

PackReview - Jobs Portal

Home Top Job Picks My Jobs Forum Logout

Top Job Picks

Job Title	Company	Job Description	Department	Location	Salary	Employee Benefits	Review	Rating	Recommendation
Dining Associate	Dish Dining Hall	Dish Dining Hall, Spring Cleaning, Throwing trash out	Dining	Centennial Campus	\$15	1 week per day	Nothing much, boring work but get to do	5/5	50/100
Lab Technician	NCSSU Linville	Work with equipment, research lab equipment, and ensure all safety protocols are followed	Electrical Engineering	Raleigh, NC	\$16	Discussed Parking, Assist Park, Service Work Station	Hands on experience with cutting edge lab equipment	5/5	50/100
Library Assistant	NC State University	Assist patrons, organize materials, and maintain library records	Biological Sciences	Online	\$15	Flex Time Off, Flexible Work Options, Travel Reimbursement	Customer interaction, ideal for study alongside	5/5	50/100
Administrative Assistant	NCSSU Health	Provide administrative support, manage schedules, and handle communications	Human Resources	Online	\$16	Flex Time Off, Flexible Hours, Tutor Reimbursement	Can be a bit monotonous, but the team environment is great	5/5	50/100

## New Enhancements:

### Top Job Picks for Users

- A dedicated section features curated job recommendations based on user ratings and feedback, guiding users toward the best opportunities.

### Community Discussion Forum

- A forum feature for community engagement, allowing users to discuss job-related topics and share advice.

### Review Editing and Updates

- Users can update their reviews, ensuring that job insights remain current and relevant over time.

### Enhanced Flash Popup Messages and Warnings

- Added new enhanced flash messages and warnings, providing timely feedback and alerts to users, improving interaction and usability.

### Enhanced Login Security:

- Strengthened the login process with password confirmation features and informative warnings, ensuring a safer and more secure user experience.



## Dining vs Library

What kind of job is preferred for a new grad?

### Comments

- Library is better as it is desk job
- Dining is good for getting food
- If you want something chill try for library

Add a Comment

Submit

## Future Scope (Version i+1):

### Machine Learning Recommendations:

- Implement AI-driven job recommendations based on users' interests, increasing the relevance and personalization of job suggestions.

### Enhanced Review Analytics:

- Introduce graphical insights for trends in job satisfaction, location-based salary data, and career growth opportunities.

### Expanded Discussion Features:

- Allow users to follow topics, upvote/downvote discussions, and receive notifications on relevant posts, making the forum more interactive.

### Mobile App Development:

- Create a mobile version of the application to expand accessibility and allow users to engage on the go.

### Gamified Review System:

- Incentivize users to contribute by adding a badge and rewards system for active participation and helpful reviews.

## Please add your Review

What is your job position?

Where do you work?

Which department do you work at?

## Code Quality:

- 48 Test Cases
- 89% Code Coverage
- Pylint & AutoPEP8 Badges
- Automated Workflows: Continuous integration

Evaluation Points	Self-Assessment	Supporting Comments
TOTAL ROWS = 105	SUM OF COLUMN = 279	
Workload is spread over the whole team (one team member is often Xtimes more productive than the others...	3	Visible In GH Repo
but nevertheless, here is a track record that everyone is contributing a lot)	3	Visible In GH Repo
Number of commits	3	Visible In GH Repo
Number of commits: by different people	3	Visible In GH Repo
Issues reports: there are <b>many</b>	3	Visible In GH Repo
Issues are being closed	3	Visible In GH Repo
Docs: doco generated, format not ugly	3	
Docs: what: point descriptions of each class/function (in isolation)	3	In Source Code files
Docs: how: for common use cases X,Y,Z mini-tutorials showing worked examples on how to do X,Y,Z	3	In ReadMe
Docs: why: docs tell a story, motivate the whole thing, deliver a punchline that makes you want to rush out and use the thing	3	In ReadMe
Docs: short video, animated, hosted on your repo. That convinces people why they want to work on your code.	3	In ReadMe
Use of version control tools	3	Evidence in GH
Test cases exist	3	
Test cases are routinely executed	3	Added in CI CD <a href="https://github.com/NCSU-SE-2024/PackReview_v3/actions/workflows/test-app.yml">https://github.com/NCSU-SE-2024/PackReview_v3/actions/workflows/test-app.yml</a>
Issues are discussed before they are closed	3	Discussed on team channel
Chat channel: exists	3	Discord Channel exists
Test cases: a large proportion of the issues related to handling failing cases.	1	
Evidence that the whole team is using the same tools: everyone can get to all tools and files	3	created venv and followed the req.txt, daily stand ups to align all tools
Evidence that the whole team is using the same tools (e.g. config files in the repo, updated by lots of different people)	3	
Evidence that the whole team is using the same tools (e.g. tutor can ask anyone to share screen, they demonstrate the system running on their computer)	3	
Evidence that the members of the team are working across multiple places in the code base	3	
Short release cycles	3	
The file .gitignore lists what files should not be saved to the repo.	3	Visible In GH Repo
The file INSTALL.md lists how to install the code	3	Visible In GH Repo
The file LICENSE.md lists rules of usage for this repo	3	Visible In GH Repo
The file CODE-OF-CONDUCT.md lists rules of behavior for this repo;	3	Visible In GH Repo
The file CONTRIBUTING.md lists coding standards and lots of tips on how to extend the system without screwing things up;	3	Visible In GH Repo
The file README.md contains all the following	3	Visible In GH Repo

Video	3	Visible In GH Repo
DOI badge: exists. To get a Digital Object Identifier, register the project at <a href="#">Zenodo</a> .	3	Visible In GH Repo
Badges showing your style checkers	3	Visible In GH Repo
Badges showing your code formatters.	3	Visible In GH Repo
Badges showing your syntax checkers.	3	Visible In GH Repo
Badges showing your code coverage tools	2	Visible In GH Repo
Badges showing any other automated analysis tools	2	Visible In GH Repo
Question 1.1: Does your website and documentation provide a clear, high-level overview of your software?	3	Refer Readme.md
Question 1.2: Does your website and documentation clearly describe the type of user who should use your software?	2	
Question 1.3: Do you publish case studies to show how your software has been used by yourself and others?	1	
Question 2.1: Is the name of your project/software unique?	3	Yes, its PackReview
Question 2.2: Is your project/software name free from trademark violations?	3	Yes
Question 3.1: Is your software available as a package that can be deployed without building it?	1	
Question 3.2: Is your software available for free?	3	Yes
Question 3.3: Is your source code publicly available to download, either as a downloadable bundle or via access to a source code repository?	3	Yes
Question 3.4: Is your software hosted in an established, third-party repository like GitHub ( <a href="https://github.com">https://github.com</a> ), BitBucket ( <a href="https://bitbucket.org">https://bitbucket.org</a> ), LaunchPad ( <a href="https://launchpad.net">https://launchpad.net</a> ) or SourceForge ( <a href="https://sourceforge.net">https://sourceforge.net</a> )?	3	Yes, link to repo is provided already
Question 4.1: Is your documentation clearly available on your website or within your software?	3	its available on Repo as instructed
Question 4.2: Does your documentation include a "quick start" guide, that provides a short overview of how to use your software with some basic examples of use?	3	Yes, a quick guide video and install md is provided
Question 4.3: If you provide more extensive documentation, does this provide clear, step-by-step instructions on how to deploy and use your software?	3	
Question 4.4: Do you provide a comprehensive guide to all your software's commands, functions and options?	3	Yes, details are provided on the repo
Question 4.5: Do you provide troubleshooting information that describes the symptoms and step-by-step solutions for problems and error messages?	1	
Question 4.6: If your software can be used as a library, package or service by other software, do you provide comprehensive API documentation?	3	Its in documentation
Question 4.7: Do you store your documentation under revision control with your source code?	3	in the readme
Question 4.8: Do you publish your release history e.g. release data, version numbers, key features of each release etc. on your web site or in your documentation?	3	github repo v3
Question 5.1: Does your software describe how a user can get help with using your software?	1	
Question 5.2: Does your website and documentation describe what support, if any, you provide to users and developers?	1	



Question 5.3: Does your project have an e-mail address or forum that is solely for supporting users?	2	
Question 5.4: Are e-mails to your support e-mail address received by more than one person?	3	
Question 5.5: Does your project have a ticketing system to manage bug reports and feature requests?	3	Github issues
Question 5.6: Is your project's ticketing system publicly visible to your users, so they can view bug reports and feature requests?	3	
Question 6.1: Is your software's architecture and design modular?	2	
Question 6.2: Does your software use an accepted coding standard or convention?	3	
Question 7.1: Does your software allow data to be imported and exported using open data formats?	1	
Question 7.2: Does your software allow communications using open communications protocols?	3	
Question 8.1: Is your software cross-platform compatible?	3	
Question 9.1: Does your software adhere to appropriate accessibility conventions or standards?	3	
Question 9.2: Does your documentation adhere to appropriate accessibility conventions or standards?	3	
Question 10.1: Is your source code stored in a repository under revision control?	3	
Question 10.2: Is each source code release a snapshot of the repository?	3	
Question 10.3: Are releases tagged in the repository?	1	
Question 10.4: Is there a branch of the repository that is always stable? (i.e. tests always pass, code always builds successfully)	3	
Question 10.5: Do you back-up your repository?	3	
Question 11.1: Do you provide publicly-available instructions for building your software from the source code?	3	
Question 11.2: Can you build, or package, your software using an automated tool?	1	
Question 11.3: Do you provide publicly-available instructions for deploying your software?	3	
Question 11.4: Does your documentation list all third-party dependencies?	3	requirements.txt
Question 11.5: Does your documentation list the version number for all third-party dependencies?	3	
Question 11.6: Does your software list the web address, and licences for all third-party dependencies and say whether the dependencies are mandatory or optional?	3	
Question 11.7: Can you download dependencies using a dependency management tool or package manager?	3	Using pip
Question 11.8: Do you have tests that can be run after your software has been built or deployed to show whether the build or deployment has been successful?	3	
Question 12.1: Do you have an automated test suite for your software?	3	
Question 12.2: Do you have a framework to periodically (e.g. nightly) run your tests on the latest version of the source code?	3	Github actions
Question 12.3: Do you use continuous integration, automatically running tests whenever changes are made to your source code?	3	

Question 12.4: Are your test results publicly visible?	3	
Question 12.5: Are all manually-run tests documented?	3	
Question 13.1: Does your project have resources (e.g. blog, Twitter, RSS feed, Facebook page, wiki, mailing list) that are regularly updated with information about your software?	1	
Question 13.2: Does your website state how many projects and users are associated with your project?	1	
Question 13.3: Do you provide success stories on your website?	1	
Question 13.4: Do you list your important partners and collaborators on your website?	3	
Question 13.5: Do you list your project's publications on your website or link to a resource where these are available?	3	DOI
Question 13.6: Do you list third-party publications that refer to your software on your website or link to a resource where these are available?	1	
Question 13.7: Can users subscribe to notifications to changes to your source code repository?	3	Github notifications
Question 13.8: If your software is developed as an open source project (and, not just a project developing open source software), do you have a governance model?	3	
Question 14.1: Do you accept contributions (e.g. bug fixes, enhancements, documentation updates, tutorials) from people who are not part of your project?	3	
Question 14.2: Do you have a contributions policy?	3	
Question 14.3: Is your contributions' policy publicly available?	3	
Question 14.4: Do contributors keep the copyright/IP of their contributions?	2	
Question 15.1: Does your website and documentation clearly state the copyright owners of your software and documentation?	3	Licenses added in repo
Question 15.2: Does each of your source code files include a copyright statement?	1	
Question 15.3: Does your website and documentation clearly state the licence of your software?	3	MIT License
Question 15.4: Is your software released under an open source licence?	3	
Question 15.5: Is your software released under an OSI-approved open-source licence?	3	
Question 15.6: Does each of your source code files include a licence header?	3	Visible in Repo
Question 15.7: Do you have a recommended citation for your software?	3	Visible in citation.cff (Need to do)
Question 16.1: Does your website or documentation include a project roadmap (a list of project and development milestones for the next 3, 6 and 12 months)?	3	
Question 16.2: Does your website or documentation describe how your project is funded, and the period over which funding is guaranteed?	1	No
Question 16.3: Do you make timely announcements of the deprecation of components, APIs, etc.?	3	yes, updates in endpoints were discussed